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A STUDY FOR THE
OLD WEST REGIONAL COMMISSION

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A STUDY FOR THE
OLD WEST REGIONAL COMMISSION

BY
MOUNTAIN WEST RESEARCH, INC.
DECEMBER 1975

OLD WEST
REGIONAL
COMMISSION

The Old West Region Commission is a Federal-State partnership designed to solve regional economic problems and stimulate orderly economic growth in the states of Montana, Nebraska, North Dakota, South Dakota and Wyoming. Established in 1972 under the Public Works and Economic Development Act of 1965, it is one of seven identical Commissions throughout the country engaged in formulating and carrying out coordinated action plans for regional economic development.

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MOUNTAIN WEST
RESEARCH INCORPORATED

January 7, 1976

Ms. Jeannette Studer
Old West Regional Commission
The Fratt Building
Suite 306A
Billings, Montana 59101

Dear Ms. Studer:

Enclosed is the USER'S GUIDE TO THE DATA. This document explains in detail the methodology and procedures used to obtain and to analyze the data collected for the CONSTRUCTION WORKER PROFILE. The entire data set is described, as are the procedures for obtaining the data on tape, punched cards, or hard copy.

This report is submitted in fulfillment of one of the initial objectives of the study: that of providing a data base for use by other researchers. Mountain West hopes that this document will be helpful to anyone interested in putting the data to further productive use. If we can be of further help in explaining our procedures or results, please contact us.

Sincerely yours,

MOUNTAIN WEST RESEARCH, INC.

Dwayne H Jelinek

Dwayne H. Jelinek
President

DHJ:st

Encl.

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THE CONSTRUCTION WORKER PROFILE STUDY

The CONSTRUCTION WORKER PROFILE was conducted for the Old West Regional Commission to study the socio-economic consequences of the construction of large energy-related facilities. The emphasis of the study was on the collection of primary data, and three distinct efforts were required.

- A **Household Survey** was conducted which consisted of door-to-door interviews with 1432 households in nine western communities which have been affected, are being affected, or will be affected by large energy-related construction projects. The purpose of the household survey was to determine household and labor force characteristics, commuting patterns, residential preferences, social integration, household expenditures, satisfaction with community services, and attitudes of residents about both the projects and their community. Respondents to the household survey included residents who lived in the community prior to the construction project(s) and, in the case of currently affected communities, newcomer construction workers and other newcomers. For the post-impact communities, a sample of all residents was interviewed.
- A **Project Survey** was undertaken which consisted of distributing and collecting short self-administered questionnaires to construction workers at 14 major construction sites in eight western states. A total of 3168 responses was obtained which indicated workers' characteristics with respect to household composition, place of residence, previous residence, and occupation.
- A **Community Survey**, during which three social scientists lived for a time in three of the Household Survey communities, and conducted structured, in-depth interviews with households and less structured interviews with institutional representatives, was the third activity of the study. The purpose of this procedure was to determine some of the construction period impacts on the personal lives of community residents and on the communities' institutions, and also to observe both individual and institutional response to those impacts.

The results of the study are summarized in 10 documents.

I. **CONSTRUCTION WORKER PROFILE: FINAL REPORT**
Purpose: To provide a detailed account of the purpose, method, and results of the study. Emphasis is placed on generalizations supported by the data with special attention to the applicability of the results to the planning and impact assessment processes.

II. **CONSTRUCTION WORKER PROFILE: SUMMARY REPORT**
Purpose: To make the objectives and principal findings of the study easily accessible to the nontechnical reader.

III. **CONSTRUCTION WORKER PROFILE: COMMUNITY REPORTS**
A. Green River and Rock Springs, Wyoming
B. Forsyth and Colstrip, Montana
C. Center, North Dakota
D. Langdon, North Dakota
E. Conrad, Montana
F. Killdeer, North Dakota
G. St. George, Utah

Purpose: To prepare seven distinct community reports containing descriptions of the Household Survey findings for individual communities and summaries of information from the Project Survey on projects relevant to each. Due to the proximity of Rock Springs to Green River and of Forsyth to Colstrip, the community reports for each of these pairs of communities were combined in single volumes under the assumption that anyone interested in one would be interested in the other.

IV. **CONSTRUCTION WORKER PROFILE: USER'S GUIDE TO THE DATA**
Purpose: To document the methodology, procedures, and results of the study so that the basic data can be used by other researchers. The entire data set is described in detail as are the procedures for obtaining the data on tape, punched cards, or hard copy.

Distribution of Publications:
The documents described above are available on request from:
Old West Regional Commission, 1730 "K" Street, N.W., Suite 426, Washington, D.C. 20006

Distribution of Data:
The procedures for the distribution of data are described in the USER'S GUIDE TO THE DATA. Questions about these procedures may be directed to:

Ms. Jeannette Studer, Old West Regional Commission, Fratt Building, Suite 306A,
Billings, Montana 59101, (406) 245-6711, Ext. 6665, OR

Ms. Jan Barringer, Mountain West Research, Inc., 123 E. University Drive, Suite 219,
Tempe, Arizona 85281, (602) 968-7991.

CONSTRUCTION WORKER PROFILE:

USER'S GUIDE TO THE DATA

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I. INTRODUCTION

A major objective of the CONSTRUCTION WORKER PROFILE STUDY was to develop and make accessible a primary data base that will be useful to other researchers. To succeed in meeting this objective, it was essential that the design of the study be rigorously developed and adhered to, and that both procedures and results be fully documented. The purpose of this document is twofold; it indicates the extent of the data that have been gathered and why, and how, the information was collected. With a thorough knowledge of what exists and where it came from, potential users will be in a position to assess the applicability of the information to their own purposes.

The USER'S GUIDE is structured around the two components of the study--the Household Survey and the Project Survey. The Household Survey is discussed first. The questionnaires are explained as is the experimental design of the study. Considerable emphasis was placed on developing sampling procedures appropriate to the objectives of the study, and these are discussed in detail. Sampling results are then evaluated carefully. Field procedures and interviewer instructions are summarized as are the basic steps in the data processing procedures. The primary data base and the revised data base are then described, and variable lists and code definitions are provided. Finally, certain descriptive data summaries which have already been prepared are described.

The next section of the report covers the same set of topics for the Project Survey, although most are dealt with only briefly because of the relative simplicity of the Project Survey. The final section of the report describes the procedures to be followed to obtain card, tape, or printed copies of any part of the data base.

II. HOUSEHOLD SURVEY

The overall objectives of the CONSTRUCTION WORKER PROFILE STUDY are: (1) to collect a set of primary data on those construction worker characteristics that will determine the social and economic impacts construction workers have on the communities in which they choose to live, and (2) to analyze these data to determine the quantitative magnitude and the stability of the crucial relationships necessary to predict the consequences of a construction project on nearby cities and towns. The Household Survey was an important part of the research design developed to meet these objectives.

An interviewer-administered questionnaire was used to collect demographic, economic, and attitudinal information from 1432 households in nine western communities. The communities are of three types in terms of their relationships to large-scale construction projects--communities previously affected by such projects, those that are presently being affected, and those that will be affected in the near future. Langdon, North Dakota, and Conrad, Montana, were both heavily affected by ABM missile site construction forces in the early 1970s and were selected for study as previously affected communities. Five communities were selected that are presently being affected--Forsyth and Colstrip, Montana; Center, North Dakota; and Rock Springs and Green River, Wyoming. The two remaining sample communities were Killdeer, North Dakota, and St. George, Utah, both of which anticipate large energy-related construction projects in their vicinity in the near future.

Population, the source of impact, and the number of survey households for each community are given in Table 1. These particular communities were selected with primary attention to obtaining geographic and size distribution. Wheatland, Wyoming was also to be included as a pre-impact community, but it was eliminated upon learning that work along lines similar to those of this study was already under way there by the University of Wyoming.

The focus of the survey was on the five communities presently being affected by large construction forces. Within these communities, differences among newcomer construction workers, other newcomers, and long time residents were identified. Data from pre-impact and post-impact communities provided additional insight into differences that can be attributed to the presence of construction workers and those problems that are simply characteristic of the times or the region.

A. METHODOLOGY

1. The Questionnaire

The objective of the Household Survey questionnaire was to elicit from respondents the information needed to estimate the magnitude of certain types of impacts which the construction of a large energy-related project is likely to have on a small, established community. The following definitions are necessary to an understanding of the objectives of the Household Survey.

TABLE 1

THE NINE HOUSEHOLD SURVEY COMMUNITIES

Community	Population[a]	Number of Households Surveyed	Source of Impact
POST-IMPACT:			
Langdon, N.D.	4,000	92	Missile Site Construction
Conrad, Montana	2,800	87	Missile Site Construction
CURRENTLY AFFECTED:			
Forsyth, Montana	2,700	193	Colstrip 1 and 2
Colstrip, Montana	3,000	148	Colstrip 1 and 2
Center, N.D.	890	68	Center 2
Rock Springs, Wyo.	26,000	432	Jim Bridger 2 and 3
Green River, Wyo.	9,000	254	Jim Bridger 2 and 3 and Texas Gulf Sulfur Mine and Plant
PRE-IMPACT:			
Killdeer, N.D.	615	67	
St. George, Utah	11,000	91	

---

[a] 1975 estimates made by local officials.

Newcomer Construction Worker--A household head, employed as a construction worker, who came to the community at the time (or after) construction of an energy-related project was begun.

Other Newcomer--A household head employed as other than a construction worker, but who came to the community at the time (or after) construction of an energy-related project was begun.

Long Time Resident--A household head who lived in the community prior to the beginning of the construction project.

More specifically, then, the objective of the Household Survey questionnaire was to make it possible to determine:

--the demands which newcomer construction workers and other newcomers make upon existing public and private services;

--whether the public and private services demanded by newcomer construction workers and other newcomers differ from those demanded by long time residents;

--income and expenditure characteristics of newcomer construction workers, other newcomers, and long time residents;

--whether the satisfaction of newcomer construction workers and other newcomers with the types and quantities of existing public and private services differs from the satisfaction of long time residents;

--whether the satisfaction of long time residents with existing public and private services is altered by the construction of large energy-related projects;

--the percentage of newcomer construction workers and other newcomers who plan to remain in the community after the construction of the project is completed;

--the percentage of long time residents who plan to leave the community because of the construction of the project;

--the feelings of long time residents about the project;

--the feelings of newcomer construction workers and other newcomers about the community;

--the effects the long time residents feel the project has had on the community;

--what factors encourage or discourage socializing between long time residents and newcomers;

--the extent to which long time residents and newcomers do socialize;

--the extent to which long time residents switch occupations and/or are drawn into the labor force during the construction of a project;

- the extent to which long time residents provide the labor needed to construct a project;
- the extent to which newcomers and their dependents are part of the labor force;
- the reasons why newcomers came to the community.

a. Structure

The Household Survey questionnaire consists of five sections: a basic section, a long time resident A section, a long time resident B section, a long time resident C section, and a newcomer section. The questions in the basic section of the questionnaire apply to all respondents. The questions in the long time resident A section apply only to respondents who both (1) lived in their community prior to the beginning of a major construction project (i.e., are long time residents) and (2) live in a community located near a major project that is currently being constructed (i.e., a currently affected community). The questions in the long time resident B section apply only to respondents who live in a community located near a major project whose construction was completed before the Household Survey took place (i.e., a previously affected community). The questions in the long time resident C section apply only to respondents who live in a community located near a major project whose construction will begin in the near future (i.e., a pre-impact community). Finally, the questions in the newcomer section apply only to respondents who came to their community after the beginning of the construction project, and who live in a currently affected community.

The structure of the questionnaire makes it possible to use cross-sectional data to make intertemporal comparisons. For example, if comparable communities can be found, the structure of the questionnaire makes it possible to find out how long time residents' satisfactions with public and private services change as a community changes from a pre-impact to a post-impact community. Without this structure, many of the objectives stated in the previous section could not be accomplished.

b. Question Groupings and Purposes

The relationship of each question to the objectives previously stated is described below.

- Question 1 of the basic section of the questionnaire provides the information needed to determine whether the respondent is a long time resident or a newcomer.

--Questions 2, 3, 11, 12, 13, 14, 15, 21, and 22 of the basic section, question 4 of the long time resident A section, question 3 of the long time resident B and C sections, and questions 1, 2, 3, and 11 of the newcomer section provide the information needed to determine the demands newcomers are likely to make upon existing public and private services, and whether those demands differ from the demands of long time residents.

--Questions 18 and 19 of the basic section provide the information needed to determine whether the satisfaction of newcomers with existing public and private services differs from the satisfaction of long time residents, and whether the satisfaction of long time residents is affected by the construction of a project.

--Questions 9 and 10 of the basic section and question 2 of the long time resident A section provide the information needed to determine the opportunities for and extent of socializing between newcomers and long time residents.

--Question 1 of the long time resident A, B, and C sections, and question 2 of the long time resident B and C sections provide the information needed to determine what effects the long time residents feel the construction of the project has had on their community.

--Question 3 of the long time resident A section provides the information needed to determine how the long time residents feel about the project.

--Questions 8, 9, and 10 of the newcomer section provide the information needed to determine how newcomers feel about the community in which they live.

--Questions 4, 5, 6, and 7 of the basic section and questions 4 and 5 of the newcomer section provide the information needed to determine the extent to which long time residents switch jobs and/or are drawn into the labor force because of the construction of a project, the extent to which long time residents are likely to provide the labor needed to construct a project, and the extent to which newcomers and their dependents are likely to search for jobs in the community.

--Question 6 of the newcomer section provides the information needed to determine how far a newcomer is willing to commute to his/her job.

--Questions 16 and 17 of the basic section provide the information needed to determine the proportion of newcomers who plan to remain in the community after the construction of the project is completed, and the proportion of long time residents who plan to leave the community because of the construction of the project.

--Question 7 of the newcomer section provides the information needed to determine why newcomers came to the community and how those reasons affect their satisfaction with and plans for staying in the community.

c. The Questionnaire

The actual interview schedules are reproduced on the following pages.

#________ ____________________________
community

Do Not
Write
In This
Column

1. How long have you lived in (or near) this community? ________________

2. Family present______or absent_____? (Observe when possible.)

3. Complete items A-E for all household members. Circle the household member number of the respondent.

Household Members

A. Relationship	1	2	3	4	5	6	7	8
Head of household								
Spouse								
Son or daughter of head								
Other relative of head								
Roomer, Boarder, Lodger								
Other unrelated to head								
B. Sex: Male								
Female								
C. Age: (actual age)								
D. Years of School Completed:								
less than H.S. Grad								
H.S. Grad								
College (no degree)								
College Graduate								
Some Grad. School								
Advanced degree								
Vo-tech School								
E. Marital Status:								
Now married								
Widowed or divorced								
Never married								

1-1 ____
1-2 ____
1-3 ____
1-4 ____
1-5 ____
1-6 ____
1-7 ____
1-8 ____
1-9 ____
1-10 ____
1-11,12 ____
1-13 ____
1-14 ____
1-15 ____
1-16 ____
1-17,18 ____
1-19 ____
1-20 ____
1-21 ____
1-22 ____
1-23,24 ____
1-25 ____
1-26 ____
1-27 ____
1-28 ____
1-29,30 ____
1-31 ____
1-33 ____
1-33 ____
1-34 ____
1-35,36 ____
1-37 ____
1-38 ____
1-39 ____
1-40 ____
1-41,42 ____
1-43 ____
1-44 ____
1-45 ____
1-46 ____
1-47.48 ____
1-49 ____
1-50 ____
1-51 ____
1-52 ____
1-53,54 ____
1-55 ____
1-56 ____

Please
Do Not
Write
In This
Column

4. What is the principal occupation of the household head?

____
(examples: teacher, carpenter, clerk)

1-57 ____
1-58 ____

In what kind of business or industry is his/her job? (probe)

____
(examples: school, power plant, supermarket; if energy-related, name of project)

1-59 ____
1-60 ____

5. How long has the household head worked at this job? ____________ 1-61 ____

a. What was the household head's previous occupation?

____

1-62 ____
1-63 ____

b. In what business or industry? ____________________

1-64 ____
1-65 ____

c. Why did he/she change jobs?

____

1-66 ____
1-67 ____

6. Do any other household members have jobs outside the home? yes ____ no ____ 1-68 ____
(Do not code.)

If yes, complete the following grid:

	Household Members		
	#2	#3	#4
relationship to head:	____	____	____
occupation:	____	____	____
industry:	____	____	____
how long at present job:	____	____	____
previous occupation:	____	____	____
previous industry:	____	____	____
Why the job change?	____	____	____

1-69,70 ____
1-71,72 ____
1-73 ____
1-74,75 ____
2-1,2 ____
2-3,4 ____
2-5 ____
2-6,7 ____
2-8,9 ____
2-10 ____
2- 11,12 ____
2- 13,14 ____
2-15,16 ____
2-17 ____
2-18,19 ____
2-20,21 ____
2-22 ____
2-23,24 ____
2-25,26 ____
2-27,28 ____

7. a. Do you drive to work? yes ____ no ____ (Do not code.)

b. If yes, how far do you drive? (one way) ____________ miles. 2-29 ____

How long does it take? (one way) ____________. 2-30 ____

c. If no, how do you get to work? ____________. 2-31 ____

How far is it to work? (one way) ____________ miles. 2-32 ____

How long does it take? (one way) ____________. 2-33 ____

Do Not
Write
In This
Column

8. How do the other members of your household who have jobs get to work?

#2	#3	#4
________method	________method	________ method
________miles (one way)	________miles (one way)	________miles(one way)
________time	________time	________time

2-34 ____
2-35 ____
2-36 ____
2-37 ____
2-38 ____
2-39 ____

9. Are most of your best friends here: _____people who have lived here longer than you have?

_____people who moved here at about the same time you did?

_____people who are newer to the area than you are?

2-40 ____
2-41 ____
2-42 ____
2-43 ____

10. Where did you meet most of your friends, or people with whom you socialize most frequently, in this area? (Rank top 3)

_____at work
_____at church
_____at local bars
_____at clubs or community activities
_____at recreation activities
_____through relatives
_____in your neighborhood
_____at school
_____other

2-44 ____
2-45 ____
2-46 ____

11. Do you own _____ or rent _____ your home?

2-47 ____

12. How many bedrooms are there in this house? ____________bedrooms

2-48 ____

13. Is your present type of housing the most satisfactory one for you, or would you prefer to live in another type?

Present type satisfactory_____
different type preferable_____

2-49 ____

14. If you would prefer to live in another type of housing, what type would you most prefer? (probe)

____

2-50 ____

15. Why aren't you living in the type of housing you most prefer?(probe)

____

____

2-51 ____
2-52 ____

16. How long do you expect your present job to last?__________________

2-53 ____

17. What are your plans for staying in this area? Do you plan to:

_____ settle down here
_____ leave immediately
_____ stay as long as work is available
_____uncertain
_____ other (specify)
____

2-54 ____

18. How satisfied are you with each of the following services in your area?

	very satisfied	satisfied	uncertain	dissatisfied	very dissatisfied	no service	Please Do Not Write In This Column
a. law enforcement	1	2	3	4	5	6	2-55 ____
b. fire protection	1	2	3	4	5	6	2-56 ____
c water supply	1	2	3	4	5	6	2-57 ____
d. sewer service	1	2	3	4	5	6	2-58 ____
e garbage collection	1	2	3	4	5	6	2-59 ____
f. streets and roads	1	2	3	4	5	6	2-60 ____
g. medical services	1	2	3	4	5	6	2-61 ____
h. outdoor sports	1	2	3	4	5	6	2-62 ____
i. indoor sports	1	2	3	4	5	6	2-63 ____
j. amusements(restaurants, movies, etc.)	1	2	3	4	5	6	2-64 ____
k. shopping facilities	1	2	3	4	5	6	2-65 ____
l. town government	1	2	3	4	5	6	2-66 ____
m. civic and service clubs	1	2	3	4	5	6	2-67 ____
n. schools	1	2	3	4	5	6	2-68 ____
o. mental health services	1	2	3	4	5	6	2-69 ____
p. availability of housing	1	2	3	4	5	6	2-70 ____
q. quality of housing	1	2	3	4	5	6	2-71 ____

19. Are there other services I haven't mentioned which are particularly satisfactory or unsatisfactory? Yes _______ No _______

	Satisfactory	Unsatisfactory
If yes, which services?	____________	____________
	____________	____________

2-72 ____
2-73 ____
2-74 ____
2-75 ____

20. Now I'd like to ask you some questions about your household expenditures. I realize that this information is personal, but please remember that all of the information you give me will be kept entirely confidential.

	Average Amount Per Month	or	Amount Per Year	% Local	% Non-local	
Housing(rent or mortgage payment)	________		________	______	______	3-1,2,3 ____ 3-4 ____
Telephone	________		________	______	______	3-5,6,7 ____ 3-8 ____
Electricity	________		________	______	______	3-9,10 ____ 3-11 ____
Natural Gas	________		________	______	______	3-12,13 ____ 3-14 ____
Fuel Oil	________		________	______	______	3-15,16 ____ 3-17 ____

No. of cars owned: ______
(Do not code)

	Average Amount Per Month	or	Amount Per Year	% Local	% non-local		Please Do Not Write In This Column
Automobile (payments)						3-18,19,20 3-21	
Gasoline & Car Repairs						3-22,23,24 3-25	
Medical Expenses and health insurance payments (excl. those automatically deducted from paycheck)						3-26,27,28 3-29	
Life insurance payments (excl. those automatically deducted from paycheck)						3-30,31 3-32	
Auto Insurance						3-33,34 3-35	
Groceries						3-36,37,38 3-39	
Restaurants, Bars, Amusements						3-40,41,42 3-43	
Travel (vacations, etc.)						3-44,45,46 3-47	
Other (clothing, gifts, etc.)						3-48,49,50 3-51	
Savings						3-52,53,54 3-55	

21. How much money is automatically deducted from your paycheck for health insurance? $ ______ 3-56 ______ 3-57 ______

22. What is your take-home pay? $ ______ per week, bi-monthly, per month (circle one) 3-58 ______ 3-59 ______

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LONGTIME RESIDENTS (A)

Now I'd like to ask you a few questions about your reaction to the energy-related construction that's been going on around here. 3-60 ____

1. Have the actual effects of the construction on the community/area been
   about what you expected __________ 3-61 ____
   better than you expected __________
   worse than you expected __________

   If better or worse, in what way(s)? 3-62 ____
   3-63 ____
   3-64 ____
   3-65 ____

2. Have you gotten to be friends with any people who have moved here within the last __________ years? Yes_____ No _____ 3-66 ____

3. In terms of your overall feelings, would you say you are glad ______ or unhappy______ that the project came here? 3-67 ____
   3-68 ____
   Why? 3-69 ____
   3-70 ____
   3-71 ____

4. In which of these ranges would your yearly family income (before taxes) fall into? (use card)

A. _____less than $2000
B. _____$2000 -$3999
C. _____$4000-$5999
D. _____$6000-$7999
E. _____$8000-$9999
F. _____$10000-$11999
G. _____$12000-$13999
H. _____$14000-$15999
I. _____$16000-$17999
J. _____$18000-$19999
K. _____$20000-$21999
L. _____$22000-$23999
M. _____$24000-$25999
N. _____$26000-$27999
O. _____$28000-$29999
P. _____$30000-$31999
Q. _____$32000-$33999
R. _____$34000-$35999
S. _____$36000-$37999
T. _____$38000-$39999
U. _____$40000 or more

3-72____
3-73____

(DO NOT ASK A - C. OBSERVE.)

A. Address ____

B.

Anglo	Hispano	Nat. American Indian	Negro	Oriental
1	2	3	4	5

3-74____

C. Type of Dwelling:

SF - 2 bedrooms _____
SF - 3 bedrooms _____
SF - 4 bedrooms _____
SF - 5 bedrooms _____
Other SF _____
duplex, townhouse, condominium _____
apartment _____
mobile home _____
other _____

3-75 ____

THANK YOU VERY MUCH FOR YOUR COOPERATION.

Do No
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Column

LONGTIME RESIDENTS (B)

Now I'd like to ask you a few questions about your reaction to the construction of the missile site near here. 3-60 ____

1. Did you expect your community/area to change when the site began to be built? yes ______ no ______ 4-1 ____

If yes, in what way(s)?

4-2 ____
4-3 ____
4-4 ____
4-5 ____

2. Were the actual effects of the construction on the community/area

about what you expected? ________ 4-6 ____
better than you expected? ________
worse than you expected? ________

If better or worse, in what way(s)?

4-7 ____
4-8 ____
4-9 ____
4-10 ____

3. In which of these ranges would your yearly family income (before taxes) fall into? (use card)

A. ____ less than $2000
B. ____ $2000-$3999
C. ____ $4000-$5999
D. ____ $6000- $7999
E. ____ $8000-$9999
F. ____ $10000-$11999
G. ____ $12000-$13999

H. ____ $14000-$15999
I. ____ $16000-$17999
J. ____ $18000-$19999
K. ____ $20000-$21999
L. ____ $22000-$23999
M. ____ $24000-$25999
N. ____ $26000-$27999

O. ____ $28000-$29999
P. ____ $30000-$31999
Q. ____ $32000-$33999
R. ____ $34000-$35999
S. ____ $36000-$37999
T. ____ $38000-$39999
U. ____ $40000 or more

4-11 ____
4-12 ____

(DO NOT ASK A - C. OBSERVE.)

A. Address ________________________________

B. Anglo 1 Hispano 2 Nat. American Indian 3 Negro 4 Oriental 5 4-13____

C. Type of Dwelling: 4-14 ____

SF - 2 bedrooms ____
SF - 3 bedrooms ____
SF - 4 bedrooms ____
SF - 5 bedrooms ____
Other SF ____

duplex, townhouse, condominium ____
apartment ____
mobile home ____
other ____

THANK YOU VERY MUCH FOR YOUR COOPERATION.

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LONGTIME RESIDENTS (C)

Now I'd like to ask you a few questions about the energy-related construction proposed for this area. 3-60 ______

1. Do you expect your community/area to change when the project begins to be built? yes ______ no ______ 4-15 ______

   If yes, in what way(s)?

   4-16 ______
   4-17 ______

   4-18 ______
   4-19 ______

2. Do you think the net effect of the project construction will be good for the community, or bad for it? good ______ bad ______

   Why?

   4-20 ______
   4-21 ______

   4-22 ______
   4-23 ______

3. In which of these ranges would your yearly family income (before taxes) fall into? (use card)

A. ______less than $2000	H. ______$14000-$15999	O. ______$28000-$29999
B. ______$2000-$3999	I. ______$16000-$17999	P. ______$30000-$31999
C. ______$4000-$5999	J. ______$18000-$19999	Q. ______$32000-$33999
D. ______$6000-$7999	K. ______$20000-$21999	R. ______$34000-$35999
E. ______$8000-$9999	L. ______$22000-$23999	S. ______$36000-$37999
F. ______$10000-$11999	M. ______$24000-$25999	T. ______$38000-$39999
G. ______$12000-$13999	N. ______$26000-$27999	U. ______$40000 or more

4-24 ______
4-25 ______

(DO NOT ASK A - C. OBSERVE.)

A. Address ______________________________

B.	Anglo	Hispano	Nat. American Indian	Negro	Oriental
	1	2	3	4	5

4-26 ______

C. Type of Dwelling: 4-27 ______

SF - 2 bedrooms ______
SF - 3 bedrooms ______
SF - 4 bedrooms ______
SF - 5 bedrooms ______
Other SF ______

duplex, townhouse, condominium ______
apartment ______
mobile home ______
other ______

THANK YOU VERY MUCH FOR YOUR COOPERATION.

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NEWCOMERS

3-60 ___

If respondent has indicated that his family (spouse and/or children) is absent, ask questions 1 and 2; if not, begin with question 3.

1. Sometimes, when a person begins a new job in a new area, he/she doesn't aways bring his/her family right away, in case things don't work out well immediately. I notice your family is NOT here with you. Can you tell me what reasons influenced the decision not to bring your family here? (probe)

4-38 ___
4-39 ___
4-40 ___
4-41 ___
4-42 ___

2. Do you hope to bring your family here? yes _______ no _______

If yes, when? _______________________

4-43 ___
4-44 ___

3. Have the other household members lived here for the same length of time as the household head? yes _______ no _______

If not, how long did the household head live here before the rest of the household moved here? _______________________

4-45 ___
4-46 ___

4. What was the location of your (head of household's last job, just before coming here? _______________________

4-47 ___
4-48 ___

5. What was your (head of household's) occupation there? _______________________

____.

4-49 ___

6. How far did you (head of household) live from your place of work there?

_______________ miles.

4-50 ___
4-51 ___

a. Did you drive to work? yes _______ no _______

b. How long did you live there? _______________________

c. (If respondent has a family, ask:)

Did your family live there with you? yes _______ no _______

If no, why not?

4-52 ___
4-53 ___
4-54 ___
4-55 ___
4-56 ___
4-57 ___
4-58 ___

7. a. For what reasons did you move here?

4-59 ___
4-60 ___

b. (If working on project), how did you learn about the job opportunities here? (probe: friend, rumor, sent by union, etc.

4-61 ___
4-62 ___

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Column

8. Now, I'd like to ask you some questions about how you feel about living in (near) ______________________ .
(name of town)
Please indicate the three words on the list below which best describe the ______________________ area as a place to live. (Rank top 2.) (card)

_____easy
_____happy
_____modern
_____lonely
_____competitive
_____impersonal

_____dull
_____exciting
_____conservative
_____rewarding
_____unfriendly
_____isolated

_____slow-moving
_____difficult
_____friendly
_____expensive
_____relaxed
_____dirty

4-63 ____
4-64 ____
4-65 ____
4-66 ____
4-67 ____
4-68 ____

9. What are the things you like MOST about living in ______________________?
(community)

4-69 ____
4-70 ____
4-71 ____
4-72 ____

10. What are the things you like LEAST about living in ______________________?
(community)

4-73 ____
4-74 ____
4-75 ____
5-1 ____

11. In which of these ranges would your yearly family income (before taxes) fall into? (use card)

A. _____less than $2000
B. _____$2000-$3999
C. _____$4000-$5999
D. _____$6000- $7999
E. _____$8000-$9999
F. _____$10000-$11999
G. _____$12000-$13999

H. _____$14000-15999
I. _____$16000-$17999
J. _____$18000-$19999
K. _____$20000-$21999
L. _____$22000-$23999
M. _____$24000-$25999
N. _____$26000-$27999

O. _____$28000-$29999
P. _____$30000-$31999
Q. _____$32000-$33999
R. _____$34000-$35999
S. _____$36000-$37999
T. _____$38000-$39999
U. _____$40000 or more

5-2 ____
5-3 ____

DO NOT ASK A - C. OBSERVE.)

A. Address ____

B.

Anglo	Hispano	Nat. American Indian	Negro	Oriental
1	2	3	4	5

5-4 ____

C. Type of Dwelling:

SF - 2 bedrooms _____
SF - 3 bedrooms _____
SF - 4 bedrooms _____
SF - 5 bedrooms _____
Other SF _____

duplex, townhouse, condominium _____
apartment _____
mobile home _____
other _____

5-5 ____

THANK YOU VERY MUCH FOR YOUR COOPERATION.

2. Sampling Procedures

a. Sampling Plan

In order to estimate the impacts of construction projects on established communities, the family characteristics, dwelling unit preferences, and expenditure patterns of both long time residents and newcomers must be known. Reliable estimation of the characteristics of any population is dependent upon the selection of a certain type and size of sample, as well as the definition of reliability employed. The type and size of the sample required in turn depend upon whether the characteristics of interest are attributes or variables.

Characteristics which are or are not possessed are referred to as attributes; those which are measurable on a continuous scale are known as variables. The procedure used to establish sample size for both types of characteristics is described below.

1) Attribute estimation

For attribute data, an estimator was arbitrarily defined as reliable if its associated error of estimate (E) and level of confidence ($1-\alpha$) were .10 and .95, respectively. That is, the sample size should be large enough and sufficiently free of biases so that if, for example, the percentage of married persons in the sample (the estimator) is 80 percent, then one can be 95 percent confident that the percentage of married persons in the target population (the parameter to be estimated) is between 70 and 90 percent.

The sample size required for a given error of estimate and a given level of confidence depends upon the true value of the parameter being estimated. This is the case because the required sample size must be found by solving the following equation:

$$E = Z(\alpha/2)\sqrt{\frac{\pi(1-\pi)}{n}}\sqrt{\frac{N-n}{N-1}}\ , \qquad (1)$$

where:

E is the desired error of estimate,

$Z(\alpha/2)$ is the upper $\alpha/2$ percentage point for the standard normal distribution,

π is the true value of the population parameter (proportion in the case of attribute data),

N is the size of the target population, and

n is the sample size.

This means that a different sample size may be required for each attribute to be estimated. To be conservative, therefore, the experimenter must determine the sample size required to estimate each attribute, and then use the largest of those sample sizes.

Fortunately, determining the required sample size for attribute estimation is not as difficult as the above paragraph implies. This is the case because the quantity $\frac{\pi(1-\pi)}{n}$ is maximized when $\pi = .5$. Thus, the maximum sample size required for estimating any attribute can be determined by substituting either .5, or the value closest to .5 which is likely to occur for π. In the Green River pre-test, none of the attributes of interest, such as being married or owning a home, was exhibited by exactly 50 percent or even 41 to 59 percent of the respondents. This indicated that .6 could be substituted for π in order to solve equation (1) for sample size.

The population sizes substituted into equation (1) were determined in the following manner. First, because the term "newcomer" is used only to identify those residents who in-migrated to a currently affected community after a major construction project was under way, all residents of the post-impact and pre-impact communities were classified as long time residents.

For the currently affected communities, 1970 census data were used to identify the long time residents. That is, the number of long time residents in the currently affected communities was estimated to be the number of residents reported for that community in the 1970 census. The difference between the most recently reported population data for the currently affected communities and the 1970 census figures was used as an estimate of the number of newcomers. The newcomers were assumed to consist of one-half newcomer construction workers and one-half other newcomers based on an assumed value of the employment multiplier of approximately two.[1] The Green River test data were consistent with this assumption.

---

[1] An adjustment is made in the sampling procedure if this assumption turns out not to be justified. Hence, it is not of particular importance.

The required sample sizes, found by solving equation (1), are given in Table 2. Because .10 is an upper bound for the true error of estimate, the sample sizes given in Table 2 are often referred to as maximum sample sizes. In most instances $\pi(1-\pi)$ will be less than .24, causing E to be less than .10.

TABLE 2

SAMPLE SIZES REQUIRED FOR ATTRIBUTE ESTIMATION WITH $E = .10$ AND $(1-\alpha) = .95$ WHEN MAX $\pi(1-\pi) = .24$

Community	Long Time Residents	Construction Worker Newcomers	Other Newcomers
Rock Springs	90	89	89
Green River	87	82	82
Forsyth	80	58	58
Colstrip	39	77	77
Center[a]	69	--	--
Conrad	85	--	--
Langdon	87	--	--
Killdeer	65	--	--
St. George	89	--	--

---

[a] The newcomer subpopulations in Center are so small that a virtual census would have been necessary to obtain reliable estimators. Even then, the number of observations would be too small for many kinds of analyses. Therefore, the decision was made to develop estimators for the population as a whole, rather than for each subpopulation. That is, for sampling purposes, Center was treated in the same manner as the pre- and post-impact communities.

2) Variables estimation

It is more difficult to determine the sample sizes required for reliable estimation of population variables (age, education, income) than it is to determine the sample sizes required for reliable estimation of population attributes (own/rent; married/not married; newcomer/long time resident). For variable estimation, the following equation must be solved for sample size:

$$E = Z(\alpha/2) \frac{\sigma}{\sqrt{n}} \sqrt{\frac{N-n}{N-1}}, \tag{2}$$

where:

E is the desired error of estimate for the characteristic being measured,

$Z(\alpha/2)$ is the upper $\alpha/2$ percentage point for the standard normal distribution,

σ is the standard deviation of the characteristic of interest for the target population,

N is the size of the target population, and

n is the sample size.

Not only may σ and E in equation (2) be different for each variable, but they also depend upon the unit of measure. Hence, it is not generally feasible to specify a maximum value for σ and a minimum value for E, and then solve for the resulting sample size. In fact, the only alternatives available to a researcher who wishes to determine the sample sizes required for reliable estimation of population variables are:

(1) to determine the sample sizes required for reliable estimation of each variable of interest, and use the largest sample size,

(2) to specify which variable is the most important and determine the sample size required for reliable estimation of that variable, or

(3) to discover which variable exhibits the most relative variability, and determine the sample size required for reliable estimation of that variable.

Each of the above alternatives has drawbacks associated with it. Because it requires both a variance and an error estimate for each variable of interest, the first alternative is both expensive and time consuming. The second alternative can result in unreliable estimates for a number of the variables of interest, and the third alternative may result in sample sizes which are much too large for many of the variables.

If, however, the most important characteristic also exhibits the greatest relative variability, then alternatives (1), (2), and (3) are equivalent. On an *a priori* basis, it was determined that household size was the most important newcomer variable in terms of the overall objectives of the study. The Green River test data indicated that household size also exhibits the greatest relative variability. That is, the coefficient of variation for household size was at least as large as the coefficient of variation for any other key variable. Sample sizes were therefore determined on the basis of the error of estimate requirement and the variance estimate of household size. Balancing the reduction in uncertainty which results from increasing sample size with the cost of increasing sample size led to the specification of an error of estimate (E) of .3 and a level of confidence ($1-\alpha$) of .95 for household size. That is, it was decided that the sample size should be large enough and sufficiently free of biases so that if, for example, the average household size for the sample is 3.7 persons, then the experimenter can be 95 percent confident that the average household size for the target population is between 3.4 and 4.0 persons. The population sizes substituted into equation (2) were defined in the same manner as for equation (1), and the sample sizes, found by solving equation (2) for n, are given in Table 3.

TABLE 3

SAMPLE SIZES REQUIRED FOR ESTIMATING HOUSEHOLD SIZE WITH $E = .3$ AND $(1-\alpha) = .95$ WHEN $\sigma = 1.5$

Community	Long Time Residents	Construction Worker Newcomers	Other Newcomers
Rock Springs	94	92	92
Green River	90	85	85
Forsyth	83	59	59
Colstrip	39	79	79
Center	71	--	--
Conrad	88	--	--
Langdon	91	--	--
Killdeer	67	--	--
St. George	93	--	--

An examination of Table 3 reveals that newcomer construction workers and other newcomers together constitute only 44 percent of the total sample. Given that the characteristics of newcomers must be accurately estimated if the impacts of major construction projects are to be reliably estimated, a lower error of estimate was felt to be desirable for these subgroups. It was decided that the characteristics of both construction worker and other newcomers should be estimated with an error of estimate of .15 and a level of confidence of .95. A further consideration is that for purposes of assessing future impacts, existing newcomer populations in the currently affected communities are but a small portion of the population from which future workers might be drawn to a new site. In this context, N becomes sufficiently large so that $\frac{N-n}{N-1}$ approaches 1 and the required sample sizes must be determined by solving the following equation for n:

$$E = Z(\alpha/2) \frac{\sigma}{\sqrt{n}} , \qquad (3)$$

where:

E is the desired error of estimate for the characteristic of interest,

$Z(\alpha/2)$ is the upper $\alpha/2$ percentage point of the standard normal distribution,

σ is the standard deviation of the characteristic of interest for the population which consists of all newcomers who could be attracted to a presently impacted community, and

n is the sample size.

Solving equation (3) for n yields n = 385. The 385 construction worker and other newcomers were allocated to the currently affected communities on a proportional basis. For example, if 65 percent of the newcomer construction worker households are in Green River, 65 percent of the newcomer construction worker interviews will be held in Green River. A proportional allocation scheme is optimal for both attribute and variable estimation when the variability and the cost of sampling are the same for each stratum. Enough households were selected from each community, however, to ensure that the error of estimate would not exceed .3 for any of the communities, i.e., to satisfy the sample size requirements shown in Table 3. The proposed number and types of households to be interviewed in each community are shown in Table 4.

TABLE 4

NUMBER AND TYPES OF HOUSEHOLDS TO BE INTERVIEWED IN STUDY COMMUNITIES

Community	Long Time Residents	Construction Worker Newcomers	Other Newcomers
Rock Springs	94	162	162
Green River	90	85	85
Forsyth	83	59	59
Colstrip	39	79	79
Center	71	--	--
Conrad	88	--	--
Langdon	91	--	--
Killdeer	67	--	--
St. George	93	--	--

3) Household selection

The procedure for collecting the required sample sizes depends upon whether the community being sampled is a currently affected community. For those communities which are not currently being affected, the procedure is quite simple and will be illustrated using Conrad as an example.

Eighty-eight households must be interviewed in Conrad and there are 950 households in Conrad. The 88 required households were selected by dividing Conrad into 88 contiguous clusters of (950 ÷ 88) or 11 households each, and randomly selecting one household from each cluster. The reason for stratifying the sample by contiguous household clusters is to eliminate biases associated with the link between residential location and economic, ethnic, or social characteristics. The reason for randomizing the starting position within each cluster is to eliminate any biases which might be introduced due to periodicities in the population. Non-response biases were controlled by not substituting for a selected household until two attempts, one of which occurred in the evening, had been made to complete the interview for the selected household. If substitution became necessary, an additional household was randomly selected from the same cluster of households as the non-respondents.

The sampling procedure for currently affected communities is slightly more complicated. The basic problem is that specific numbers of long time resident, other newcomers and newcomer construction worker households must be interviewed. In Rock Springs, for example, 94 long time resident households, 162 newcomer construction worker households, and 162 other newcomer households had to be interviewed out of a population of 7429 households.

If Rock Springs had been divided into 418 (94 + 162 + 162) contiguous clusters of (7429 ÷ 418) or 17 households each, and one household randomly selected from each cluster, the first 94 households selected could all have been long time residents. If that had happened, all economic, ethnic, and social strata would probably not have been included in the sample of long time residents. To safeguard against such a possibility, a two-stage procedure was devised for the currently affected communities.

Proper functioning of the two-stage procedure is dependent upon two factors. First, the interviewer must pass through the entire community during Phase I without filling the quota for any of the three subgroups of households. Second, during Phase I, the interviewer must evaluate the socio-economic structure of the community. It was decided that the number of interviews to be obtained on the first pass through the community should be small enough to make the probability less than or equal to .01 that the quota for any single category of household would be exhausted. In order to evaluate the socio-economic structure of the community, the interviewers were asked to divide the community into relatively homogeneous subsets on the basis of type and value of house as they obtained the Phase I interviews. The above actions ensured the proper functioning of the sampling procedure. The specific steps involved in the collection of such a sample are illustrated using Rock Springs as an example.

First, Rock Springs would be divided into 175 contiguous clusters of 42 households each, rather than 418 clusters of 17 households each. With only 175 clusters, the probability is less than .01 that the quota for any single category of household will be filled before the interviewer completes all 175 interviews. The results of these 175 interviews would then be used to revise the estimates of the percentage of long time residents, newcomer construction workers, and other newcomers in the community. For example, if the number of long time residents, newcomer construction workers, and other newcomers obtained turns out to be 70, 60, and 45, respectively, then the percentage of households belonging to each group would be estimated to be 40, 34, and 26 percent, respectively.

At this point, 24 long time resident, 102 newcomer construction worker, and 117 other newcomer interviews would still be needed. In order to obtain the additional interviews, Rock Springs would be divided into 488 clusters of 15 households each. With 488 clusters, the probability is greater than .99 that the quota for each category of household would be filled before the interviewer completes the interviews. As quotas are filled, the interviewers would begin to screen the selected households in order to determine whether the interview should be completed. If some quotas are still unfilled after the interviewer contacts 488 households, additional households would be selected from those locations found by the interviewer to have high concentrations of the types of households being sought.

b. Sampling Results

Table 5 gives the proposed and actual numbers and types of households interviewed for the CONSTRUCTION WORKER PROFILE.

1) Post- and pre-impact communities

If the values which were assumed for N and σ in order to solve equations (1) and (2) are correct, and if the actual and proposed sample sizes differ very little, the data for the communities are as reliable as anticipated. The interviewers obtained their interviews by dividing the communities into clusters of a given number of households, and then randomly selecting one household from each cluster to be interviewed. If the assumed population size (N) had been in error, the interviewers would either have completed the proposed number of interviews before passing through the entire community or have been unable to obtain the proposed number of interviews by interviewing only one household in each cluster. This did not happen. The estimated population sizes must therefore have been accurate.

The value assumed for the population standard deviation (σ) was 1.5. The sample standard deviations for each community were: Center, 1.924; Colstrip, 1.946; Conrad, 1.831; Forsyth, 1.570; Green River, 1.564; Killdeer, 1.518; Langdon, 1.554; Rock Springs, 1.584; St. George, 2.006. The median and mean for the sample standard deviations are 1.584 and 1.719, respectively. The population standard deviation, therefore, appears to have been underestimated. For the extreme case--St. George--this means the error of estimate could be as high as .39 rather than .30, even if the actual and proposed sample sizes are identical.

In fact, the actual and proposed sample sizes are nearly identical for the post- and pre-impact communities. The data for Killdeer and Langdon thus appear to be as reliable as anticipated. The data for Center, Conrad, and St. George may be slightly less reliable than anticipated.

TABLE 5

ACTUAL AND PROPOSED NUMBERS AND TYPES OF HOUSEHOLDS INTERVIEWED IN STUDY COMMUNITIES

	Long Time Residents		Newcomer Construction Workers		Other Newcomers		Total	
Community	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed
Rock Springs	96	94	191	162	145	162	432	418
Green River	96	90	61	85	96	85	253	260
Forsyth	88	83	64	59	39	59	191	201
Colstrip	41	39	85	79	22	79	148	197
Center	48	71	15	0	5	0	68	71
Conrad	87	88	--	--	--	--	87	88
Langdon	92	91	--	--	--	--	92	91
Killdeer	67	67	--	--	--	--	67	67
St. George	91	93	--	--	--	--	91	93
TOTAL	706	803	416	385	307	385	1429	1573

2) Currently affected communities

For the currently affected communities, the differences between the actual and proposed sample sizes are oftentimes quite large. In Colstrip, for example, 79 other newcomer households were supposed to be interviewed, but only 22 were actually interviewed. These discrepancies stem from the fact that newcomers were not, as was assumed when developing the sampling plan, equally distributed between construction workers and others. Hence, the results of the Phase I sampling were used to revise the number of newcomer construction worker and other newcomer households to be interviewed. The revision process was quite simple and is explained below.

Table 6 gives the population estimates used to derive the proposed sample sizes for the currently affected communities. These estimates were based on the assumption that all residents entering a community after 1970 would be classified as newcomers, and the assumption that newcomers would be equally distributed between construction workers and others. Neither of the assumptions was found to be valid, as shown by the Phase I sampling results given in Table 7, although the first was much closer than the second. The revised population estimates are given in Table 8. The revised estimates are consistent with the long time resident categorization used in the study, and reflect the information given in Table 7 concerning the distribution of newcomers between construction workers and others. The revised population estimates in Table 8 were used to revise the proposed numbers and types of households to be interviewed in the currently affected communities. Table 9 gives the revised proposed and actual numbers and types of households interviewed for the CONSTRUCTION WORKER PROFILE.

The actual and revised proposed sample sizes differ by very little. The data for Forsyth, Green River, and Rock Springs thus appear to be as reliable as anticipated. The data for Colstrip may be slightly less reliable than anticipated, i.e., $\hat{\sigma} = 1.946$ rather than 1.5.

Revising the sample sizes in the manner indicated above had one unfortunate consequence--the number of other newcomer households interviewed was reduced from 385 to 303. The data on other newcomers are therefore somewhat less reliable than originally anticipated. However, the diminution in the reliability of those data, as measured by the error of estimate, was not very great. For example, the error of estimate for household size for 95 percent confidence only changed from .15 to .19.

TABLE 6

INITIAL SUBPOPULATION ESTIMATES FOR CURRENTLY AFFECTED COMMUNITIES

Community	Long Time Residents	Newcomer Construction Workers	Other Newcomers	Total
Rock Springs				
Number	11,674	7,163	7,163	26,000
Percent	45%	27.5%	27.5%	100%
Green River				
Number	4,340	2,330	2,330	9,000
Percent	48%	26%	26%	100%
Forsyth				
Number	1,872	414	414	2,700
Percent	69%	15.5%	15.5%	100%
Colstrip				
Number	200	1,350	1,350	2,900
Percent	7%	46.5%	46.5%	100%

TABLE 7

PHASE I SAMPLING RESULTS FOR CURRENTLY AFFECTED COMMUNITIES

Community	Long Time Residents	Newcomer Construction Workers	Other Newcomers	Total
Rock Springs				
Number	50	25	22	97
Percent	51%	26%	23%	100%
Green River				
Number	46	8	31	85
Percent	54%	9%	37%	100%
Forsyth				
Number	78	20	11	109
Percent	72%	18%	10%	100%
Colstrip				
Number	15	90	7	112
Percent	14%	80%	6%	100%

TABLE 8

REVISED SUBPOPULATION ESTIMATES FOR CURRENTLY AFFECTED COMMUNITIES

Community	Long Time Residents	Newcomer Construction Workers	Other Newcomers	Total
Rock Springs				
Number	13,260	6,760	5,980	26,000
Percent	51%	26%	23%	100%
Green River				
Number	4,860	810	3,330	9,000
Percent	54%	9%	37%	100%
Forsyth				
Number	1,944	486	270	2,700
Percent	72%	18%	10%	100%
Colstrip				
Number	406	2,320	174	2,900
Percent	14%	80%	6%	100%

TABLE 9

ACTUAL AND REVISED PROPOSED NUMBERS AND TYPES OF HOUSEHOLDS INTERVIEWED IN CURRENTLY AFFECTED COMMUNITIES

	Long Time Residents		Newcomer Construction Workers		Other Newcomers		Total[a]	
Community	Actual	Revised Proposed	Actual	Revised Proposed	Actual	Revised Proposed	Actual	Revised Proposed
Rock Springs	96	94	177	167	145	187	432	448
Green River	88	90	59	70	96	110	254	270
Forsyth	88	84	64	60	40	46	193	190
Colstrip	37	61	85	88	22	42	148	191
TOTAL	309	329	385	385	303	385	1027	1099

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[a] Some respondents could not be classified as either a long time resident or a newcomer. Some respondents also declined to specify their occupation. The columns, therefore, do not sum to the total.

3. Field Procedures

There were two field work supervisors for the Household Survey. Their responsibilities included:

(1) hiring and training of interviewers,

(2) sampling of households to be interviewed,

(3) collection of capital facilities data,

(4) editing of completed questionnaires, and

(5) general supervision of interviewers.

Both supervisors began the field work in Conrad, Montana, in order to standardize their procedures so that data collection would proceed in the same manner in each community surveyed. The general procedure followed in each community began with the collection of capital facilities information. In this way, the field supervisor could introduce himself and discuss the project with community leaders so that a number of people would be aware that the survey was beginning and would understand its purpose and scope. Another advantage of talking to community officials at the beginning was that frequently the officials could suggest names of potential local interviewers. In most of the communities, it proved to be advantageous to hire local interviewers. Respondents frequently felt more comfortable talking to other residents of the community than to strangers. In some communities the hiring of local interviewers proved to be difficult, and in those cases, interviewers were brought from other places. Local interviewers were hired in Killdeer and Langdon, North Dakota, in St. George, Utah, and in Forsyth, Colstrip, and Conrad, Montana. In Center, North Dakota, where researchers from North Dakota State University were conducting a survey, their interviewers were hired to conduct the Household Survey. In Green River and Rock Springs, Wyoming, where nearly half of the total sample was interviewed, efforts were made to hire local interviewers, but a week's attempts at hiring suitable local people proved fruitless, and interviewers were brought from Denver.

Each field work supervisor trained the interviewers in basic interview techniques and in the techniques required for the Household Survey. Many of the people hired for the Household Survey had some interviewing experience and did not need extensive training. In cases where the interviewers were inexperienced, they were accompanied for the first day by an experienced interviewer who demonstrated the proper procedures.

In all communities, the field work supervisors mapped or listed the appropriate dwellings to be included in the sample. This was done by driving or walking through the town, dividing it into clusters of the appropriate size, and, for each cluster, choosing the appropriate dwelling to be approached by the interviewer. As interviewers turned in completed forms, the sampling was checked for accuracy and the field work supervisor edited completed forms. Any interview that had to be voided was replaced with an interview conducted in the same cluster of dwellings. Interviewers were given thorough instructions for proper substitution when the originally selected household refused to be interviewed. When no one was at home at the original choice, the interviewer returned at another time of day to complete the questionnaire. After two tries, the interviewer substituted in the same manner as for a refusal. It was hoped that in this way oversampling of retired persons and undersampling of working couples and single persons would be avoided. These procedures were followed systematically in all nine communities studied.

A copy of the "Interviewer Instructions" follows.

Study Summary Given to Interviewers

This study is part of a research program on the impact of energy projects at the local level sponsored by the Old West Regional Commission and being carried out by Mountain West Research, Inc. The City of ____________ is not involved in the planning or sponsorship of the survey. City officials are, however, aware of the survey and its purposes.

The purpose of this research program is to help individuals and communities better anticipate the impacts of construction projects associated with energy development in the West. In order to do this we need a broad-based set of primary data on construction projects, construction workers and communities which are, have been, or will be impacted by energy-related construction projects.

One part of this study is a Household Survey to be carried out in nine communities in four states. Most of these communities are or will be affected by energy-related projects. Several of the communities affected in the recent past have been near missile installation projects. The purpose of the Household Survey is to collect current information on the characteristics of households, on employment and commuting patterns of household members, and on household expenditures. Information is also requested on the quality of services and facilities available in the study communities. Appropriate questions are also asked on attitudes toward the nature and extent of impact from projects.

Analyzed with the information already available from other studies, the household survey will provide data allowing for better planning to assist various types of communities prepare for the impact of large construction projects. None of the information from the survey will be published or released on a household-by-household basis. The results will be compiled and analyzed for each community surveyed and for the nine communities together. For additional information on the study contact:

Ms. Judy Glazner
Mountain West Research, Inc.
280 Columbine Street
Suite 301
Denver, Colorado 80206

Ms. Jeannette Studer
Old West Regional Commission
Fratt Building
Suite 306A
Billings, Montana 59101

Interviewer Instructions:

Participation in the survey by respondents is entirely voluntary. It is to your advantage of warn potential respondents in advance of the type of questions to be asked (particularly those on finances) so you can determine as soon as possible whether they will complete the interview. If respondents refuse to answer all or a significant number of questions (particularly those on finances) thank them for their time and terminate the interview. Follow the instructions for substitution given by the supervisors.

Introduce yourself to respondents by name. Explain to them who you are working for and what the study and survey are about. Ask them if they have a few minutes now (approximately 20) to answer the questionnaire, or whether you might come back at some specified later time.

Assure respondents that the information they give you will be kept completely confidential and that the results of the questionnaires will be used to compile statistics relating to the community as a whole and groupings of the nine communities being studied. (Names should not be written on the questionnaires. Addresses are requested as a control on the sampling procedures followed. If respondents do not wish their addresses written on the questionnaire do not do so. In either case respondents will not be contacted again as a result of their participation in the survey.)

You will be asking the respondent in the household about the household head's current and past employment and household finances generally. You should use your judgment as to whether the respondent is knowledgeable about the household, although usually only the head of household or his/her spouse will be able to supply adequate information about hosuehold finances.

If respondents give you a difficult time, or if you have reason to believe that the information you are receiving is not accurate, do not hesitate to politely terminate the interview. Wait until a logical stopping point on the questionnaire, thank the respondent and leave. Otherwise you will be wasting your own and the respondent's time. If you have to terminate an interview, write VOID across the top of the questionnaire and follow the instructions given later for replacing voided or non-respondent households.

The Questionnaire

Write the name of the community you are interviewing in at the top of the form. Place your own initials on the top of the page.

1. This should be the length of time the household has lived in or close to the community. If the household is not a family, write in the length of time the head of household has resided here. Indicate length of time in months only if the period of time involved is less than two years.

2. You are to indicate here whether the head of household's family is living with him/her at present. If the household head does not have a family (single, widowed, divorced, etc.) write N/A by the question. The information in the grid below will provide a check on the response to this question. A married couple without children is considered a family here.

3. Circle the number of the person in the household you are interviewing. Make sure that you fill out the information in the grid for all of the members of the household--adults and children. If there is a question as to who is head of the household, suggest that the member who contributes the most money to the support of the household be considered head. If there is not a family in the household, consider the respondent as household head. The household head will always be household member #1. If there is a spouse, consider him/her as household member #2.

Several single persons living together should be considered one household. If a household consists of a family plus one or more single (related or unrelated) persons, consider this to be one household and fill out one questionnaire.

To fill out the grid you need to ask for the relationship of the household member to the head (begin with the head), his/her sex, age, highest educational level, and marital status. With the exception of age, this information can be entered by placing check marks in the appropriate row of each column.

4. Try to get the respondent to be specific about the household head's job title. If the respondent is not sure, ask him/her to describe the duties involved and use your own judgment. Do the same for industry. If you are uncertain about titles or categories, write down details.

If the household head or other members have more than one principal occupation, record specific information on how occupations are combined and give the information requested for both.

If the head of household is retired, indicate how long he has been retired.

5. Try to get specific reasons for changes in jobs (desired to change locations, transferred, wanted better pay, hours, working conditions, etc.).

6. Follow the same instructions as for question 4. Make sure the household member numbers agree with the information given in question 8 below.

7. Refers to the head of household. If he/she does not drive, make sure that you indicate how he/she gets to work.

8. Make sure that the numbers here agree with the numbers used for household members in question 6.

9. If the respondent has difficulty in generalizing here, ask him to think of a few specific "best friends." Try to mark only one of the three categories.

10. Write in the rank numbers 1-3 in the appropriate blanks. If "other" is ranked, specify what other is.

11. "Home" should be "current place of residence," whether house, mobile home, apartment, condominium.

12. Modify the wording here as necessary, substituting apartment, mobile home, etc., for house.

13. If respondents indicate that they are satisfied with their present type of housing, do not ask questions 14 and 15.

14. Try to keep descriptions of preferred types of housing realistic and specific. If respondents indicate that they want "better" or "larger" types, ask them if they want more bedrooms, if so how many. If not bedrooms, what do they mean by larger, a family room? a basement? more play room for children? or more rooms generally. Try to be as specific as possible. If they indicate that they want a different type of housing (structural frame rather than mobile, house rather than apartment, etc.) again try to be specific on the type and size preferred. If a different locale (country rather than city, etc.) is indicated, again try to get a specific response.

15. Again, try to get specific reasons for not having the preferred type of housing. If none is forthcoming try to suggest some without putting an answer into their mouths (make sure they do agree with the reasons suggested, rather than just going along to get the questionnaire finished).

16. This question refers to the head of household. If the response is "until retirement," "indefinitely," etc. try to get some figure in years. Do not press too much on this if the respondent cannot provide a figure in years.

17. Should be clear.

18. It may be easier to have the respondent fill this section out. (The respondent can fill out the remainder of the questionnaire up to the last page. If this is done, make

sure you follow his progress on another questionnaire and carefully edit the section when the interview is complete to make sure there are no blanks.) "No Service" should be circled if the service is not available in the community, not to indicate that the service provided is so inadequate as to provide no service.

19. Should be clear.

20. Household expenditures: In order to estimate this (how much of the salaries of workers will be spent locally, and for what types of goods and services), it is necessary to know the approximate amounts of expenditures by existing residents and the distribution of expenditures locally and non-locally (primarily in larger towns or cities nearby).

Do not try to coerce this information out of respondents. If they refuse to provide this information, fill out the remaining few items, thank them for their cooperation on the interview, and follow the procedures for substituting another household.

You may need to help some respondents estimate monthly or yearly expenditures. This can be done by working up from estimates of weekly expenditures in areas such as groceries, restaurants, amusements, clothing, etc., and working out monthly figures from this information. It will be helpful to total up roughly the monthly expenditures indicated and to ask if this sounds about right for total basic monthly expenditures.

If respondents know the information, the "other" category should be detailed by separate categories in the space below question 22 (clothing, payments on other vehicles or purchases, donations, and other obligations). BE SURE TO NOTE DOWN BOTH MONTHLY OR YEARLY AMOUNTS AND THE PERCENTAGE OF EACH SPENT LOCALLY (IN THE COMMUNITY) OR NON-LOCALLY.

21. Make sure the deductions entered here are for the same period of time as the take-home pay given in question 22.

22. The information requested here is for the take-home pay of the head of household only after tax deductions. If the head of household is self-employed, and cannot provide a monthly figure, ask for an approximate yearly figure after taxes and business expenses are deducted (say for the previous year).

4. Preparation for Data Processing

After the questionnaires were filled out by an interviewer, they were prepared for data processing. This procedure was performed in three steps--coding, keypunching, and verifying--each of which is discussed below.

a. Coding

The first step was one in which the information on the questionnaires was coded for transference to computer cards. All of the questionnaires were coded by the same person to insure consistency. Numerical codes for all except the open-ended questions were established before coding began. Because the answers to the open-ended questions could not be anticipated in advance, the codes for those questions could not be included in the instructions. Instead, each answer was listed and numbered consecutively as it was encountered during the coding.

b. Keypunching and Verification

After coding, the data were keypunched and verified. The verification was carried out by two persons; the first read aloud both the data and the appropriate column on the computer card, while the second person checked this information against a listing of the data cards. The keypunchers did not participate in verification of the data.

Some indication of the reliability of the coding and verifying can be obtained by examining the frequency distributions for the data. That is, if the numbers 1 and 2 are the only legitimate responses to a question, and ten 3's appear as responses, either the coding or the verifying was not done properly. Unfortunately, other less obvious types of errors, such as the keypunching of a 1 rather than a 2, cannot be detected by an examination of the frequency distributions of the keypunched responses. Nevertheless, the number of obvious errors committed does provide some measure, however imprecise, of the total number of errors which are likely to have occurred. The number of obvious errors detected were:

8 for Langdon
13 for Conrad
17 for Forsyth
19 for Colstrip
7 for Center
24 for Rock Springs
22 for Green River
14 for Killdeer
17 for St. George

The small number of obvious errors committed for each community implies that overall the keypunched data are reliable.

c. Validity Checks

Validity is always a problem with survey research. The severity of the problem, however, varies with the type of question asked. The answers to the questions designed to obtain demographic information, for example, are probably valid. This is the case because the respondents both know the answers to those types of questions and have little, if any, reason to bias their answers to them. On the other hand, community pride, perceptions as to what the data are going to be used for, or any number of other factors could cause respondents to bias their answers to questions about satisfactions, likes, or dislikes. The hope is that any biases which are present in the responses to those types of questions will offset each other, and hence the aggregate or summary data will be valid.

In the Household Survey, the greatest problem with respect to validity lies with the expenditure and income data. In the first place, few, if any, of the respondents can be expected to know offhand the amount of their average monthly expenditures on car repairs, groceries, or amusements; and the records needed to determine average monthly expenditures by category cannot be expected to exist. Moreover, biases in the expenditure and income data cannot be assumed to offset each other. For example, very few people are likely to overstate what they spend at bars. Similarly, very few persons with low incomes are likely to understate their incomes. The validity of the expenditure and income data must, therefore, be checked.

The "balancing differences" method was used to check the validity of the income and expenditure data. That is, it was assumed that the income and expenditure data were estimated independently by the respondents (a reasonable assumption since the respondents were never asked to total their expenditures). It was also assumed that respondents are more likely to underestimate their expenditures than to overestimate them. Thus, if monthly expenditures and savings accounted for at least one-half of the monthly gross (before taxes) family income, the data were considered to be reliable. However, a stricter limit was used if the respondent's family spent more than was earned. Expenditures could be greater than income by only 5 percent or $100 a month, whichever is greater. Any larger discrepancy would indicate considerable debt and imply that the data are unreliable.

In total, the expenditure data on 188 or 13.1 percent of the questionnaires were judged to be unreliable. Broken down by type of community, the expenditure data were voided on 25.3 percent of the questionnaires from the pre-impact communities, 10.0 percent of the questionnaires from the currently affected communities, and 21.2 percent of the questionnaires from the post-impact communities.

B. HOUSEHOLD SURVEY DATA

The household survey data are in three forms, a primary data set of 201 variables, a revised data set of 122 variables, and data summaries for each variable of the revised data set. The primary data base consists of all variables obtained directly by the survey. The revised data base consists of condensations and simplifications of the primary data which were subjected to summary analysis and used in preparation of the CONSTRUCTION WORKER PROFILE: FINAL REPORT. Each of the data sets is described below.

1. Primary Data Base

In the establishment of the data base, two goals were strived for: (1) that the data be stored in a manner which would facilitate ease of use; and (2) that the data not have value judgments or preconceptions built into them.

In order to allow ease of keypunching when the original data set was coded, there was no spacing between variables. Each variable was allowed the minimum number of columns necessary to punch all codes. In some cases, a variable allowed one column would have 10 codes, necessitating the use of zero as a valid code. When the data were stored for use by others, two simplifying alterations were made. First, all variables were separated to allow five columns per variable. This simplifies the format statement used to read the data and provides visual separation for anyone using card or listed versions of the data.

The additional spacing allowed a further simplification which eliminates an extra step if it is necessary to distinguish a blank from a punched zero as in the case of the variables which have zero as a valid code. In order to eliminate this step, the data were altered when stored on tape so that in every case that zero is a valid code, "9999" is read for a non-response, or a blank. The variables for which this was true are the following: 2, 9, 14, 19, 24, 29, 34, 39, 44, 74, 148, and 182. In every other case, a non-response is read as a zero.

Separation of the variables had one additional effect: 14 cards per questionnaire are required for storage. In order to eliminate any possibility of loss of order, each card image is identified in the last five columns with the number of the questionnaire and the card number for that questionnaire, i.e., consecutively from 1 to 14.

With the exception of the above changes in form, the data are identical to the original. No attempt was made to group the variables or values, or to recode them. The variables are in the order in which the corresponding questions were asked on the questionnaire.

a. Variable and Value Identification Lists

The variable descriptions, their identification by number, the number of the interview question by which each was obtained, and the position of each on the cards are given in the Variable Identification List which follows. The coded values for the variables are contained in the Value Identification List. The variables which have identical codes are listed together with the codes in the Value Identification List. The variables are identified by number and a 40-character label on the summary printout. The Variable Identification List should be used to locate the variables on the cards.[2]

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[2] The codes for several of the open-ended questions are neither precise nor distinct. For example, one of the codes for "Reason Newcomer Household Moved to the New Community" is "Better Job." Whether this response means a better paying job, a more secure job, or a more prestigious job cannot be ascertained. The instructions given to the coder were to write down exactly what was on the questionnaire for open-ended questions, unless the intent was unmistakable. Other users are thereby given the opportunity to group the respondent answers in any manner they deem appropriate.

VARIABLE IDENTIFICATION LIST

1. Basic Section

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
1	1-5		1	Study community
1	6-10	1	2	Length of time household head has lived in study community
1	11-15	2	3	Whether household head has a family, and whether that family is present
1	16-20		4	Number of persons in household
1	21-25		5	Household type
1	26-30		6	Life cycle stage of household
1	31-35	3A1	7	Relationship of household member #1 to head of household
1	36-40	3B1	8	Sex of household member #1
1	41-45	3C1	9	Age of household member #1
1	46-50	3D1	10	Education of household member #1
1	51-55	3E1	11	Marital status of household member #1
1	56-60	3A2	12	Relationship of spouse to head of household
1	61-65	3B2	13	Sex of spouse
1	66-70	3C2	14	Age of spouse
1	71-75	3D2	15	Education of spouse
2	1-5	3E2	16	Marital status of spouse
2	6-10	3A3	17	Relationship of household member #3 to head of household
2	11-15	3B3	18	Sex of household member #3
2	16-20	3C3	19	Age of household member #3
2	21-25	3D3	20	Education of household member #3
2	26-30	3E3	21	Marital status of household member #3
2	31-35	3A4	22	Relationship of household member #4 to head of household
2	36-40	3B4	23	Sex of household member #4
2	41-45	3C4	24	Age of household member #4
2	46-50	3D4	25	Education of household member #4
2	51-55	3E4	26	Marital status of household member #4

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
2	56-60	3A5	27	Relationship of household member #5 to head of household
2	61-65	3B5	28	Sex of household member #5
2	66-70	3C5	29	Age of household member #5
2	71-75	3D5	30	Education of household member #5
3	1-5	3E5	31	Marital status of household member #5
3	6-10	3A6	32	Relationship of household member #6 to head of household
3	11-15	3B6	33	Sex of household member #6
3	16-20	3C6	34	Age of household member #6
3	21-25	3D6	35	Education of household member #6
3	26-30	3E6	36	Marital status of household member #6
3	31-35	3A7	37	Relationship of household member #7 to head of household
3	36-40	3B7	38	Sex of household member #7
3	41-45	3C7	39	Age of household member #7
3	46-50	3D7	40	Education of household member #7
3	51-55	3E7	41	Marital status of household member #7
3	56-60	3A8	42	Relationship of household member #8 to head of household
3	61-65	3B8	43	Sex of household member #8
3	66-70	3C8	44	Age of household member #8
3	71-75	3D8	45	Education of household member #8
4	1-5	3E8	46	Marital status of household member #8
4	6-10	4A	47	Principal occupation of household head
4	11-15	4B	48	Type of industry in which household head is employed
4	16-20	5A	49	How long household head has been employed at present job
4	21-25	5B	50	Household head's previous occupation
4	26-30	5C	51	Type of industry in which household head was previously employed
4	31-35	5D	52	Reason household head changed jobs

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
4	36-40	6A1	53	Relationship of worker #2 to household head
4	41-45	6B1	54	Occupation of worker #2
4	46-50	6C1	55	Industry of worker #2
4	51-55	6D1	56	How long worker #2 has been employed at present job
4	56-60	6E1	57	Previous occupation of worker #2
4	61-65	6F1	58	Previous industry of worker #2
4	66-70	6G1	59	Reason worker #2 changed jobs
4	71-75	6A2	60	Relationship of worker #3 to household head
5	1-5	6B2	61	Occupation of worker #3
5	6-10	6C2	62	Industry of worker #3
5	11-15	6D2	63	How long worker #3 has been employed at present job
5	16-20	6E2	64	Previous occupation of worker #3
5	21-25	6F2	65	Previous industry of worker #3
5	26-30	6G2	66	Reason worker #3 changed jobs
5	31-35	6A3	67	Relationship of worker #4 to household head
5	36-40	6B3	68	Occupation of worker #4
5	41-45	6C3	69	Industry of worker #4
5	46-50	6D3	70	How long worker #4 has been employed at present job
5	51-55	6E3	71	Previous occupation of worker #4
5	56-60	6F3	72	Previous industry of worker #4
5	61-65	6G3	73	Reason worker #4 changed jobs
5	66-70	7A	74	Distance household head drives to work one way
5	71-75	7B	75	Time it takes household head to drive to work one way
6	1-5	7C	76	How non-driving household head travels to work
6	6-10	7D	77	Distance to work for non-driving household head one way
6	11-15	7E	78	Time it takes non-driving household head to travel to work one way

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
6	16-20	8A1	79	How working member #2 travels to work
6	21-25	8B1	80	Distance working member #2 travels to work one way
6	26-30	8C1	81	Time it takes working member #2 to travel to work one way
6	31-35	8A2	82	How working member #3 travels to work
6	36-40	8B2	83	Distance working member #3 travels to work one way
6	41-45	8C2	84	Time it takes working member #3 to travel to work
6	46-50	8A3	85	How working member #4 travels to work
6	51-55	8B3	86	Distance working member #4 travels to work
6	56-60	8C3	87	Time it takes working member #4 to travel to work one way
6	61-65	9	88	Length of time respondent's best friends have lived in the area
6	66-70	10A	89	First mentioned way most of respondent's best friends were met
6	71-75	10B	90	Second mentioned way most of respondent's best friends were met
7	1-5	10C	91	Third mentioned way most of respondent's best friends were met
7	6-10	11	92	Whether household head owns or rents home
7	11-15	12	93	Number of bedrooms in home
7	16-20	13	94	Respondent's satisfaction with present type of housing
7	21-25	14	95	Type of housing respondent most prefers
7	26-30	15	96	Primary reason respondent is not living in most preferred housing type
7	31-35	16	97	How long respondent expects household head's present job to last

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
7	36-40	17	98	Respondent's plans for staying in area
7	41-45	18A	99	Respondent's satisfaction with law enforcement
7	46-50	18B	100	Respondent's satisfaction with fire protection
7	51-55	18C	101	Respondent's satisfaction with water supply
7	56-60	18D	102	Respondent's satisfaction with sewer service
7	61-65	18E	103	Respondent's satisfaction with garbage collection
7	66-70	18F	104	Respondent's satisfaction with streets and roads
7	71-75	18G	105	Respondent's satisfaction with medical services
8	1-5	18H	106	Respondent's satisfaction with outdoor sports
8	6-10	18I	107	Respondent's satisfaction with indoor sports
8	11-15	18J	108	Respondent's satisfaction with amusements
8	16-20	18K	109	Respondent's satisfaction with shopping facilities
8	21-25	18L	110	Respondent's satisfaction with town government
8	26-30	18M	111	Respondent's satisfaction with civic and service clubs
8	31-35	18N	112	Respondent's satisfaction with schools
8	36-40	18O	113	Respondent's satisfaction with mental health services
8	41-45	18P	114	Respondent's satisfaction with availability of housing
8	46-50	18Q	115	Respondent's satisfaction with quality of housing
8	51-55	19A	116	Respondent's first mentioned other service which is particularly satisfactory or unsatisfactory
8	56-60	19B	117	Respondent's second mentioned other service which is particularly satisfactory or unsatisfactory
8	61-65	20A1	118	Monthly expenditures for housing

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
8	66-70	20B1	119	Percentage of housing expenditures that is local
8	71-75	20A2	120	Monthly expenditures for telephone
9	1-5	20B2	121	Percentage of telephone expenditures that is local
9	6-10	20A3	122	Monthly expenditures for electricity
9	11-15	20B3	123	Percentage of electricity expenditures that is local
9	16-20	20A4	124	Monthly expenditures for natural gas
9	21-25	20B4	125	Percentage of natural gas expenditures that is local
9	26-30	20A5	126	Monthly expenditures for fuel oil
9	31-35	20B5	127	Percentage of fuel oil expenditures that is local
9	36-40	20A6	128	Monthly expenditures for auto payments
9	41-45	20B6	129	Percentage of auto payments that is local
9	46-50	20A7	130	Monthly expenditures for gas and car repairs
9	51-55	20B7	131	Percentage of gas and car repairs that is local
9	56-60	20A8	132	Monthly expenditures for medical services and health insurance payments
9	61-65	20B8	133	Percentage of medical services expenditures and health insurance payments that is local
9	66-70	20A9	134	Monthly expenditures for life insurance
9	71-75	20B9	135	Percentage of life insurance expenditures that is local
10	1-5	20A10	136	Monthly expenditures for auto insurance
10	6-10	20B10	137	Percentage of auto insurance expenditures that is local
10	11-15	20A11	138	Monthly expenditures for groceries
10	16-20	20B11	139	Percentage of grocery expenditures that is local

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
10	21-25	20A12	140	Monthly expenditures for amusements
10	26-30	20B12	141	Percentage of amusement expenditures that is local
10	31-35	20A13	142	Monthly expenditures for travel
10	36-40	20B13	143	Percentage of travel expenditures that is local
10	41-45	20A14	144	Monthly expenditures for other items
10	46-50	20B14	145	Percentage of other expenditures that is local
10	51-55	20A15	146	Monthly savings
10	56-50	20B15	147	Percentage of savings deposited locally
10	61-65	21	148	Weekly amount automatically deducted from paycheck for health insurance
10	66-70	22	149	Weekly take-home pay
10	71-75	0	150	Whether the household head is a long time resident, a newcomer, or unclassifiable

VARIABLE IDENTIFICATION LIST

2. Long Time Residents

A Section
(Currently Affected Communities)

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
11	1-5	1A	151	Long time resident (A) comparison of actual and expected effects of the construction project on the community
11	6-10	1B	152	First mentioned way long time resident (A) feels actual effects have been better or worse than expected
11	11-15	1C	153	Second mentioned way long time resident (A) feels actual effects have been better or worse than expected
11	16-20	2	154	Whether long time resident (A) made friends with any newcomers
11	21-25	3A	155	Whether long time resident (A) is glad or unhappy the construction project came
11	26-30	3B	156	First mentioned reason long time resident (A) is glad or unhappy the construction project came
11	31-35	3C	157	Second mentioned reason long time resident (A) is glad or unhappy the construction project came
11	36-40	4A	158	Long time resident (A) yearly gross family income
11	41-45	4B	159	Long time resident (A) ethnic group
11	46-50	4C	160	Long time resident (A) type of dwelling

VARIABLE IDENTIFICATION LIST

3. Long Time Residents

B Section
(Post-Impact Communities)

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
11	51-55	1A	161	Whether long time resident (B) expected the community to change when the site began to be built
11	56-60	1B	162	First mentioned way long time resident (B) expected the community to change
11	61-65	1C	163	Second mentioned way long time resident (B) expected the community to change
11	66-70	2A	164	Long time resident (B) comparison of actual and expected effects of the construction project on the community
11	71-75	2B	165	First mentioned way long time resident (B) feels actual effects have been better or worse than expected
12	1-5	2C	166	Second mentioned way long time resident (B) feels actual effects have been better or worse than expected
12	6-10	3A	167	Long time resident (B) yearly gross family income
12	11-15	3B	168	Long time resident (B) ethnic group
12	16-20	3C	169	Long time resident (B) type of dwelling

VARIABLE IDENTIFICATION LIST

4. Long Time Residents

C Section
(Pre-Impact Communities)

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
12	21-25	1A	170	Whether long time resident (C) expects the community to change when the site begins to be built
12	26-30	1B	171	First mentioned way long time resident (C) expects the community to change
12	31-35	1C	172	Second mentioned way long time resident (C) expects the community to change
12	36-40	2A	173	Whether long time resident (C) feels the net effect of the construction project will be good or bad for the community
12	41-45	2B	174	Primary reason long time resident (C) feels the net effect of the construction project will be good or bad for the community
12	46-50	3A	175	Long time resident (C) yearly gross family income
12	51-55	3B	176	Long time resident (C) ethnic group
12	56-60	3C	177	Long time resident (C) type of dwelling

VARIABLE IDENTIFICATION LIST

5. Newcomers Section

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
12	61-65	1A	178	First mentioned reason newcomer respondent did not bring family into new area
12	66-70	1B	179	Second mentioned reason newcomer respondent did not bring family into new area
12	71-75	2A	180	Whether newcomer respondent hopes to bring family into area
13	1-5	2B	181	When newcomer respondent hopes to bring family into area
13	6-10	3	182	Length of time newcomer household head lived in area before family arrived
13	11-15	4	183	Location of newcomer household head's last job before coming into area
13	16-20	5	184	Newcomer household head's occupation on last job before coming into area
13	21-25	6A	185	Distance newcomer household head lived from work in previous community
13	26-30	6B	186	Whether newcomer household head drove to work in previous community
13	31-35	6C	187	Length of time newcomer household head lived in previous community
13	36-40	6D	188	Whether family lived with newcomer household head in previous community
13	41-45	6E	189	First mentioned reason family did not live with newcomer head of household in previous community
13	46-50	6F	190	Second mentioned reason family did not live with newcomer head of household in previous community
13	51-55	7A	191	Reason newcomer head of household moved into area
13	56-60	7B	192	How newcomer household head working on construction projects learned about the job opportunities in the community

Card Number	Column Number(s)	Question Number	Variable Number	Variable Description
13	61-65	8A	193	Newcomer respondent's first selected word that best describes the community as a place to live
13	66-70	8B	194	Newcomer respondent's second selected word that best describes the community as a place to live
13	71-75	9A	195	Newcomer respondent's first mentioned thing liked most about living in community
14	1-5	9B	196	Newcomer respondent's second mentioned thing liked most about living in community
14	6-10	10A	197	Newcomer respondent's first mentioned thing liked least about living in community
14	11-15	10B	198	Newcomer respondent's second mentioned thing liked least about living in community
14	16-20	11A	199	Newcomer's yearly gross family income
14	21-25	11B	200	Newcomer respondent's ethnic group
14	26-30	11C	201	Newcomer's type of dwelling

VALUE IDENTIFICATION LIST

Variable Number	Variable Label and Codes
1	STUDY COMMUNITY
	1 = Green River 2 = Rock Springs 4 = Conrad 5 = Colstrip 6 = Forsyth 7 = Killdeer 8 = Center 9 = Langdon 10 = St. George
2	LENGTH OF TIME IN STUDY COMMUNITY
	0 = indefinitely or forever 9999 = non-response
49	LENGTH AT PRESENT JOB FOR HOUSEHOLD HEAD
56	HOW LONG HOUSEHOLD MEMBER #2 HAS WORKED AT PRESENT JOB
63	HOW LONG HOUSEHOLD MEMBER #3 HAS WORKED AT PRESENT JOB
70	HOW LONG HOUSEHOLD MEMBER #4 HAS WORKED AT PRESENT JOB
97	HOW LONG RESPONDENT EXPECTS HOUSEHOLD HEAD'S PRESENT JOB TO LAST
187	HOW LONG NEWCOMER HOUSEHOLD HEAD LIVED IN PREVIOUS COMMUNITY
	1 = less than 6 months 2 = 6 months but less than 1 year 3 = 1 year but less than 2 years 4 = 2 years but less than 3 years 5 = 3-5 years 6 = 6-9 years 7 = 10-14 years 8 = 15-19 years 9 = 20 years or more
3	FAMILY PRESENT OR ABSENT
	1 = family present 2 = family absent 3 = one person family

Variable Number	Variable Label and Codes
4	NUMBER OF PERSONS IN HOUSEHOLD 1-8 = actual number of persons 9 = 9 or more persons
5	HOUSEHOLD TYPE 1 = unattached individual 2 = more than one unattached individual 3 = married person--family not present 4 = more than one married person--family not present 5 = husband-wife family without children 6 = husband-wife family with children 7 = husband-wife family without children but with other relation(s) 8 = husband-wife family without children but with unrelated individual(s) 9 = father or mother with children 10 = husband-wife family with children and with unrelated individual(s) 11 = husband-wife family with children and with other related individual(s) 12 = other family group 13 = other family group with unrelated individual(s)
6	LIFE CYCLE STAGE OF HOUSEHOLD 1 = pre-child (young married couple--no children) 2 = child-bearing (parents in 20s--youngest child under 10) 3 = child-rearing (parents in 30s--youngest child 10 or older) 4 = child-launching (parents in 30s or 40s--children late teens or college age) 5 = post-child (parents in 50s or older--children gone) or older couple (no children) 0 = none of the above categories

Variable Number	Variable Label and Codes
7	RELATIONSHIP OF MEMBER #1 TO HOUSEHOLD HEAD
12	RELATIONSHIP OF MEMBER #2 TO HOUSEHOLD HEAD
17	RELATIONSHIP OF MEMBER #3 TO HOUSEHOLD HEAD
22	RELATIONSHIP OF MEMBER #4 TO HOUSEHOLD HEAD
27	RELATIONSHIP OF MEMBER #5 TO HOUSEHOLD HEAD
32	RELATIONSHIP OF MEMBER #6 TO HOUSEHOLD HEAD
37	RELATIONSHIP OF MEMBER #7 TO HOUSEHOLD HEAD
42	RELATIONSHIP OF MEMBER #8 TO HOUSEHOLD HEAD
53	RELATIONSHIP OF WORKER #2 TO HOUSEHOLD HEAD
60	RELATIONSHIP OF WORKER #3 TO HOUSEHOLD HEAD
67	RELATIONSHIP OF WORKER #4 TO HOUSEHOLD HEAD
	1 = household head 2 = spouse of household head 3 = child of household head 4 = other relative of household head 5 = roomer, boarder, or lodger 6 = other person unrelated to household head
8	SEX OF HOUSEHOLD MEMBER #1
13	SEX OF HOUSEHOLD MEMBER #2
18	SEX OF HOUSEHOLD MEMBER #3
23	SEX OF HOUSEHOLD MEMBER #4
28	SEX OF HOUSEHOLD MEMBER #5
33	SEX OF HOUSEHOLD MEMBER #6
38	SEX OF HOUSEHOLD MEMBER #7
43	SEX OF HOUSEHOLD MEMBER #8
	1 = male 2 = female
9	AGE OF HOUSEHOLD MEMBER #1
14	AGE OF HOUSEHOLD MEMBER #2
19	AGE OF HOUSEHOLD MEMBER #3
24	AGE OF HOUSEHOLD MEMBER #4
29	AGE OF HOUSEHOLD MEMBER #5
34	AGE OF HOUSEHOLD MEMBER #6
39	AGE OF HOUSEHOLD MEMBER #7
44	AGE OF HOUSEHOLD MEMBER #8
	0 = less than one year 1-98 = actual age 99 = 99 years of older 9999 = non-response

Variable Number	Variable Label and Codes
10	EDUCATION OF HOUSEHOLD MEMBER #1
15	EDUCATION OF HOUSEHOLD MEMBER #2
20	EDUCATION OF HOUSEHOLD MEMBER #3
25	EDUCATION OF HOUSEHOLD MEMBER #4
30	EDUCATION OF HOUSEHOLD MEMBER #5
35	EDUCATION OF HOUSEHOLD MEMBER #6
40	EDUCATION OF HOUSEHOLD MEMBER #7
45	EDUCATION OF HOUSEHOLD MEMBER #8
	1 = less than high school graduate 2 = high school graduate 3 = some college but no bachelors degree 4 = college graduate 5 = some graduate school but no advanced degree 6 = advanced degree 7 = vocational or technical school
11	MARITAL STATUS OF HOUSEHOLD MEMBER #1
16	MARITAL STATUS OF HOUSEHOLD MEMBER #2
21	MARITAL STATUS OF HOUSEHOLD MEMBER #3
26	MARITAL STATUS OF HOUSEHOLD MEMBER #4
31	MARITAL STATUS OF HOUSEHOLD MEMBER #5
36	MARITAL STATUS OF HOUSEHOLD MEMBER #6
41	MARITAL STATUS OF HOUSEHOLD MEMBER #7
46	MARITAL STATUS OF HOUSEHOLD MEMBER #8
	1 = now married 2 = widowed or divorced 3 = never married
47	PRINCIPAL OCCUPATION OF HOUSEHOLD HEAD
	Construction Employment: 1 = professional, technical, and kindred 2 = supervisory 3 = craftsmen and kindred 4 = operatives except transport 5 = transport equipment operatives 6 = laborers
	Non-Construction Employment: 7 = professional, technical, and kindred 8 = managerial 9 = sales 10 = craftsmen, foremen, and kindred 11 = clerical and kindred 12 = operatives except transport 13 = transport equipment operatives 14 = laborers except farm 15 = farmers, farm foremen, farm laborers 16 = service workers except private household

Variable Number	Variable Label and Codes
	17 = private household workers
	18 = retired
	19 = housewives
	20 = student
	21 = armed services
48	HOUSEHOLD HEAD'S PRINCIPAL INDUSTRY TYPE
	1 = agriculture, forestry, fisheries
	2 = mining
	3 = construction: Colstrip 1,2
	4 = construction: Center 2
	5 = construction: Jim Bridger 2,3
	6 = construction: Texas Gulf Sulfur Plant
	7 = construction: Texas Gulf Sulfur Mine
	8 = other energy-related construction
	9 = non-energy-related construction
	10 = manufacturing
	11 = transportation, communications, or utilities
	12 = wholesale trade
	13 = retail trade
	14 = finance, insurance, real estate
	15 = personal services
	16 = health and recreation
	17 = professional and educational services
	18 = public administration
	19 = armed forces
	20 = other
	21 = student
	22 = retired
	23 = unemployed
50	PREVIOUS OCCUPATION OF HOUSEHOLD HEAD
54	PRINCIPAL OCCUPATION OF WORKER #2
57	PREVIOUS OCCUPATION OF WORKER #2
61	PRINCIPAL OCCUPATION OF WORKER #3
64	PREVIOUS OCCUPATION OF WORKER #3
68	PRINCIPAL OCCUPATION OF WORKER #4
71	PREVIOUS OCCUPATION OF WORKER #4
184	NEWCOMER HOUSEHOLD HEAD'S PRINCIPAL OCCUPATION ON LAST JOB BEFORE MOVING TO NEW COMMUNITY
	Construction Employment:
	1 = professional, technical, and kindred
	2 = supervisory
	3 = craftsmen and kindred
	4 = operatives except transport
	5 = transport equipment operatives
	6 = laborers

Variable Number	Variable Label and Codes
	Non-Construction Employment: 7 = professional, technical, and kindred 8 = managerial 9 = sales 10 = craftsmen, foremen, and kindred 11 = clerical and kindred 12 = operatives except transport 13 = transport equipment operatives 14 = laborers except farm 15 = farmers, farm foremen, farm laborers 16 = service workers except private household 17 = private household workers 18 = retired 19 = housewives 20 = other non-construction employment 21 = student 22 = armed services
51	HOUSEHOLD HEAD'S PREVIOUS INDUSTRY TYPE
55	PRINCIPAL INDUSTRY TYPE OF WORKER #2
58	PREVIOUS INDUSTRY TYPE OF WORKER #2
62	PRINCIPAL INDUSTRY TYPE OF WORKER #3
65	PREVIOUS INDUSTRY TYPE OF WORKER #3
69	PRINCIPAL INDUSTRY TYPE OF WORKER #4
72	PREVIOUS INDUSTRY TYPE OF WORKER #4
	1 = agriculture, forestry, fisheries 2 = mining 3 = construction: Colstrip 1,2 4 = construction: Center 2 5 = construction: Jim Bridger 2,3 6 = construction: Texas Gulf Sulfur Plant 7 = construction: Texas Gulf Sulfur Mine 8 = other energy-related construction 9 = non-energy-related construction 10 = manufacturing 11 = transportation, communications, or utilities 12 = wholesale trade 13 = retail trade 14 = finance, insurance, real estate 15 = personal services 16 = health and recreation 17 = professional and educational services 18 = public administration 19 = other industry 20 = retired 21 = student 22 = armed forces 23 = unemployed

Variable Number	Variable Label and Codes
52	PRIMARY REASON HOUSEHOLD HEAD CHANGED JOBS
59	PRIMARY REASON WORKER #2 CHANGED JOBS
66	PRIMARY REASON WORKER #3 CHANGED JOBS
73	PRIMARY REASON WORKER #4 CHANGED JOBS

1 = wanted to live somewhere other than in old community
2 = relocation
3 = job with better pay
4 = more satisfying job
5 = job transfer
6 = only place could find a job
7 = desire to live in Wyoming
8 = better climate
9 = discharged from military service
10 = traveling opportunity
11 = graduation
12 = medical reasons
13 = job promotion
14 = job with better security
15 = previous job terminated (ex: laid off or not enough work)
16 = relocated with husband
17 = more family responsibility
18 = proximity to family and home
19 = personal reasons
20 = job
21 = children grown (housewife)
22 = retired
23 = better union
24 = desire to live in Rock Springs
25 = refused to be transferred by company
26 = relocated with wife
27 = desire to live out west
28 = relocated with family
29 = not enough money to continue schooling
30 = political reasons
31 = summer job (return to school in fall)
32 = desire to live in Green River
33 = quit school for a job
34 = proximity to friends
35 = to get away from family
36 = inherited farm
37 = desire to live in small town
38 = elected to the position
39 = desire to live in Montana
40 = desire to live in Forsyth

Variable Number	Variable Label and Codes
74	DISTANCE HOUSEHOLD HEAD DRIVES TO WORK ONE WAY
	1 = fewer than 10 miles
	2 = 10-19 miles
	3 = 20-29 miles
	4 = 30-39 miles
	5 = 40-49 miles
	6 = 50-59 miles
	7 = 60-69 miles
	8 = 70-79 miles
	9 = 80 or more miles
	0 = does not drive
	9999 = non-response
77	DISTANCE HOUSEHOLD HEADS WHO DO NOT DRIVE TRAVEL TO WORK ONE WAY
80	DISTANCE WORKER #2 TRAVELS TO WORK ONE WAY
83	DISTANCE WORKER #3 TRAVELS TO WORK ONE WAY
86	DISTANCE WORKER #4 TRAVELS TO WORK ONE WAY
185	DISTANCE NEWCOMER HOUSEHOLD HEAD TRAVELED TO WORK IN PREVIOUS COMMUNITY
	1 = fewer than 10 miles
	2 = 10-19 miles
	3 = 20-29 miles
	4 = 30-39 miles
	5 = 40-49 miles
	6 = 50-59 miles
	7 = 60-69 miles
	8 = 70-79 miles
	9 = 80 or more miles
75	TIME HOUSEHOLD HEAD SPENDS DRIVING TO WORK ONE WAY
78	TIME HOUSEHOLD HEADS WHO DO NOT DRIVE TO WORK SPEND TRAVELING TO WORK ONE WAY
81	TIME WORKER #2 SPENDS TRAVELING TO WORK ONE WAY
84	TIME WORKER #3 SPENDS TRAVELING TO WORK ONE WAY
87	TIME WORKER #4 SPENDS TRAVELING TO WORK ONE WAY
	1 = fewer than 15 minutes
	2 = 15-29 minutes
	3 = 30-44 minutes
	4 = 45-59 minutes
	5 = 60 minutes-1 hour, 14 minutes
	6 = 1 hour, 15 minutes-1-1/2 hours
	7 = more than 1-1/2 hours

Variable Number	Variable Label and Codes
76 79 82 85	HOW HOUSEHOLD HEADS WHO DO NOT DRIVE GET TO WORK HOW WORKER #2 TRAVELS TO WORK HOW WORKER #3 TRAVELS TO WORK HOW WORKER #4 TRAVELS TO WORK 1 = drive 2 = bus 3 = train 4 = walk 5 = other
88	HOW LONG RESPONDENT'S BEST FRIENDS HAVE LIVED IN THE AREA 1 = longer than the respondent 2 = about the same length of time as the respondent 3 = a shorter time than the respondent
89 90 91	FIRST WAY MOST OF RESPONDENT'S FRIENDS WERE MET SECOND WAY MOST OF RESPONDENT'S FRIENDS WERE MET THIRD WAY MOST OF RESPONDENT'S FRIENDS WERE MET 1 = at work 2 = at church 3 = at local bars 4 = at clubs or community activities 5 = at recreation activities 6 = through relatives 7 = in respondent's neighborhood 8 = at school 9 = other
92	WHETHER HOUSEHOLD HEAD OWNS OR RENTS HOME 1 = own 2 = rent
93	NUMBER OF BEDROOMS IN HOME 1-8 = actual number of bedrooms 9 = 9 or more bedrooms
94	RESPONDENT'S SATISFACTION WITH PRESENT TYPE OF HOUSING 1 = present type satisfactory 2 = different type preferable

Variable Number	Variable Label and Codes
95	TYPE OF HOUSING DISSATISFIED RESPONDENT MOST PREFERS 1 = single family 2 = duplex, condominium, or townhouse 3 = apartment 4 = mobile home 5 = other
96	PRIMARY REASON DISSATISFIED RESPONDENT NOT LIVING IN PREFERRED HOUSING TYPE 1 = unavailable 2 = too expensive 3 = unavailable in right price range 4 = overpriced 5 = company housing 6 = temporary job 7 = new to community (have not had time to find one) 8 = uncertain of location desired 9 = in the process of moving (or presently being built) 10 = low income government housing 11 = medical reasons restrict it 12 = prefer not to move
98	RESPONDENT'S PLANS FOR STAYING IN THE AREA 1 = plan to settle down here 2 = plan to leave immediately 3 = plan to stay as long as work is available 4 = uncertain 5 = plan to leave at retirement 6 = plan to stay until transferred 7 = other
99	RESPONDENT'S SATISFACTION WITH LAW ENFORCEMENT
100	RESPONDENT'S SATISFACTION WITH FIRE PROTECTION
101	RESPONDENT'S SATISFACTION WITH WATER SUPPLY
102	RESPONDENT'S SATISFACTION WITH SEWER SERVICE
103	RESPONDENT'S SATISFACTION WITH GARBAGE COLLECTION
104	RESPONDENT'S SATISFACTION WITH STREETS AND ROADS
105	RESPONDENT'S SATISFACTION WITH MEDICAL SERVICES
106	RESPONDENT'S SATISFACTION WITH OUTDOOR SPORTS
107	RESPONDENT'S SATISFACTION WITH INDOOR SPORTS
108	RESPONDENT'S SATISFACTION WITH AMUSEMENTS
109	RESPONDENT'S SATISFACTION WITH SHOPPING FACILITIES
110	RESPONDENT'S SATISFACTION WITH TOWN GOVERNMENT
111	RESPONDENT'S SATISFACTION WITH CIVIC AND SERVICE CLUBS
112	RESPONDENT'S SATISFACTION WITH SCHOOLS
113	RESPONDENT'S SATISFACTION WITH MENTAL HEALTH SERVICES

Variable Number	Variable Label and Codes
114	RESPONDENT'S SATISFACTION WITH AVAILABILITY OF HOUSING
115	RESPONDENT'S SATISFACTION WITH QUALITY OF HOUSING
	1 = very satisfied 2 = satisfied 3 = uncertain 4 = dissatisfied 5 = very dissatisfied 6 = no service
116	FIRST OTHER SERVICE WHICH IS PARTICULARLY SATISFACTORY OR UNSATISFACTORY
117	SECOND OTHER SERVICE WHICH IS PARTICULARLY SATISFACTORY OR UNSATISFACTORY
	Satisfactory: 1 = telephone service 2 = cable television 3 = power facilities 4 = postal services 5 = service stations and garages 6 = churches 7 = medical services and facilities 8 = parks 9 = mental health programs 10 = centers for the aged 11 = laundries 12 = sports activities and facilities 13 = streets and roads 14 = grocery stores 15 = prostitution 16 = repair service on appliances 17 = winter street cleaning and other city services 18 = swimming pool 19 = library 20 = train service 21 = merchants 22 = bus service 23 = other goods and services
	Unsatisfactory: 24 = lack of goods and services 25 = toll roads to Rock Springs 26 = high cost of goods and services 27 = drugs in schools 28 = babysitters 29 = apartments with recreational facilities 30 = quality of housing 31 = sanitary landfills should not charge money for use

Variable Number	Variable Label and Codes
	32 = street cleaning
	33 = quality of streets, roads, sidewalks, and lighting
	34 = cost and quality of restaurants
	35 = traffic control and issuance of drivers licenses
	36 = newspaper delivery service
	37 = child care facilities
	38 = tennis courts
	39 = cultural programs and activities for adults
	40 = repair service for appliances
	41 = newspapers
	42 = golf course
	43 = corrals for horses and spraying for insects
	44 = lack of general repairmen
	45 = outdoor and indoor recreational facilities
	46 = zoning, city officials, and town in general
	47 = quality of water
	48 = radio and television stations
	49 = service for locating apartments
	50 = utilities too expensive
	51 = need public pool
	52 = consumer protection service
	53 = recreational activities for children
	54 = recreational activities for families
	55 = attitude of business
	56 = difficulty of cashing checks
	57 = cost of housing
	58 = no YMCA or YWCA
	59 = need for major discount chain
	60 = county services
	61 = not enough laundromats
	62 = postal service
	63 = hot lunches at schools
	64 = lack of parks and playgrounds
	65 = Pacific Power Company
	66 = mental health facilities
	67 = telephone service
	68 = lack of entertainment and amusement
	69 = inadequate services and facilities for trailer courts
	70 = urban renewal
	71 = public transportation and railroad crossing
	72 = high cost of water
	73 = dog catching and veterinarians
	74 = law enforcement
	75 = ambulance service
	76 = no banquet facilities for large groups
	77 = medical facilities and lack of doctors
	78 = air services too expensive

Variable Number	Variable Label and Codes
	79 = taxi cab service 80 = lack of apartment buildings and houses 81 = prostitution 82 = laundry facilities in apartment buildings 83 = housing for the aged 84 = auto service and dealers 85 = lack of meat markets 86 = public library 87 = community activities for all ages 88 = public schools 89 = downtown parking and general parking problems 90 = town needs painting and more landscaping 91 = recreational activities for teenagers and young adults 92 = need skating rink 93 = poor banking services 94 = beauty shops 95 = food services 96 = electric power 97 = need public restrooms in shopping centers 98 = plumbing company and plumbers 99 = need large department stores and overall better shopping facilities
118	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR HOUSING
120	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR TELEPHONE
128	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR AUTO PAYMENTS
130	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR GAS AND CAR MAINTENANCE
132	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR MEDICAL SERVICES AND HEALTH INSURANCE
138	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR GROCERIES
140	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR AMUSEMENTS
142	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR TRAVEL
144	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR OTHER ITEMS
146	AVERAGE MONTHLY HOUSEHOLD SAVINGS
	1-998 = average expenditure to the nearest dollar 999 = 999 dollars or more
122	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR ELECTRICITY
124	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR NATURAL GAS
126	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR FUEL OIL
134	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR LIFE INSURANCE
136	AVERAGE MONTHLY HOUSEHOLD EXPENDITURES FOR AUTO INSURANCE
	1-98 = average expenditure to the nearest dollar 99 = 99 dollars or more

Variable Number	Variable Label and Codes
119	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR HOUSING THAT IS LOCAL
121	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR TELEPHONE THAT IS LOCAL
123	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR ELECTRICITY THAT IS LOCAL
125	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR NATURAL GAS THAT IS LOCAL
127	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR FUEL OIL THAT IS LOCAL
129	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR AUTO PAYMENTS THAT IS LOCAL
131	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR GAS AND CAR MAINTENANCE THAT IS LOCAL
133	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR MEDICAL SERVICES AND HEALTH INSURANCE THAT IS LOCAL
135	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR LIFE INSURANCE THAT IS LOCAL
137	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR AUTO INSURANCE THAT IS LOCAL
139	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR GROCERIES THAT IS LOCAL
141	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR AMUSEMENTS THAT IS LOCAL
143	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR TRAVEL THAT IS LOCAL
145	PERCENTAGE OF AVERAGE MONTHLY EXPENDITURES FOR OTHER ITEMS THAT IS LOCAL
147	PERCENTAGE OF AVERAGE MONTHLY SAVINGS THAT IS LOCAL 1 = 0 percent 2 = 1-24 percent 3 = 25 percent 4 = 26-49 percent 5 = 50 percent 6 = 51-74 percent 7 = 75 percent 8 = 76-99 percent 9 = 100 percent
148	WEEKLY AMOUNT DEDUCTED FROM HOUSEHOLD HEAD'S PAYCHECK FOR HEALTH INSURANCE 0-98 = actual amount to the nearest dollar 99 = 99 dollars or more 9999 = non-response
149	HOUSEHOLD HEAD'S WEEKLY TAKE-HOME PAY 0-98 = actual amount to the nearest ten dollars divided by 10, e.g., 87 = 870 dollars 99 = 985 dollars or more

Variable Number	Variable Label and Codes
150	TYPE OF RESPONDENT 1 = long time resident 2 = newcomer 3 = cannot be classified as either a newcomer or a long time resident
	(NOTE: Long residents are abbreviated for the following variables as "LT" plus letter of section questions are from. Thus, "LTA" refers to long time residents of currently affected communities.)
151	LTA's COMPARISON OF ACTUAL AND EXPECTED EFFECTS OF PROJECT 1 = about what was expected 2 = better than expected 3 = worse than expected
152	FIRST WAY LTA FEELS ACTUAL EFFECTS OF PROJECT HAVE BEEN BETTER OR WORSE THAN EXPECTED
153	SECOND WAY LTA FEELS ACTUAL EFFECTS OF PROJECT HAVE BEEN BETTER OR WORSE THAN EXPECTED
165	FIRST WAY LTB FEELS ACTUAL EFFECTS OF PROJECT HAVE BEEN BETTER OR WORSE THAN EXPECTED
166	SECOND WAY LTB FEELS ACTUAL EFFECTS OF PROJECT HAVE BEEN BETTER OR WORSE THAN EXPECTED Better: 1 = more commercial facilities 2 = town's problems solved better 3 = more job opportunities 4 = financial benefits 5 = better schools 6 = cleaner town 7 = more housing being built 8 = improved roads and streets 9 = more care of homes and property 10 = quality of people ariving 11 = increased population 12 = improved community services and facilities 13 = more involvement in community work 14 = general growth of town 15 = did not ruin the town 16 = town well-planned for growth 17 = no increase in crime

Variable Number	Variable Label and Codes
	Worse:
	50 = crowded schools
	51 = higher crime rate
	52 = traffic congestion
	53 = higher cost of living
	54 = population increase
	55 = housing
	56 = increased job competition
	57 = inadequate city government
	58 = undesirable people arriving
	59 = attitude of business
	60 = people less friendly
	61 = ruining the environment
	62 = inadequate community facilities and services
	63 = noise pollution
	64 = law enforcement
	65 = drug abuse
	66 = air pollution
	67 = streets and roads
	68 = waste problem
	69 = town overcrowded
	70 = project was not beneficial
	71 = overall town problems
	72 = inadequate commercial facilities
	73 = medical facilities and services
	74 = lack of variety in goods and services
	75 = long time residents are not getting the jobs
	76 = town grew larger than anticipated
	77 = inadequate recreational facilities
	78 = poorly planned growth
	79 = created problems
	80 = project terminated
	81 = higher taxes
	82 = taverns
	83 = health problems
154	WHETHER LTA MADE FRIENDS WITH NEWCOMERS
	1 = yes
	2 = no
155	WHETHER LTA IS GLAD OR UNHAPPY THE PROJECT CAME
	1 = glad
	2 = unhappy

Variable Number	Variable Label and Codes
156	FIRST REASON LTA IS GLAD OR UNHAPPY PROJECT CAME
157	SECOND REASON LTA IS GLAD OR UNHAPPY PROJECT CAME

Glad:

1 = financial benefits
2 = more commercial facilities and services
3 = job opportunities
4 = progress of town
5 = brought industry
6 = proximity to power plant
7 = new and better schools
8 = new friends
9 = more medical services
10 = better city services
11 = more recreation for kids
12 = more community pride
13 = more housing available
14 = good people arriving with project
15 = increased population
16 = enjoys living in community
17 = general growth of town
18 = problems of town solved better
19 = more recreational activities
20 = growth well planned and controlled
21 = street and road improvements
22 = lower prices for goods and services
23 = need energy
24 = economic boom of community
25 = Montana needs it
26 = brought happiness into community

Unhappy:

50 = increased crime
51 = undesirable people arriving
52 = increased population (like small town)
53 = too many single men arriving
54 = progressed too quickly
55 = higher cost of living
56 = crowded schools
57 = traffic congestion
58 = inadequate city government
59 = sanitation problems
60 = drug problems
61 = inadequate city facilities and services
62 = progress of town
63 = newcomers taking over the town
64 = lack of commercial facilities
65 = businessmen are taking advantage of customers
66 = overall growth of town
67 = newcomers ruining the fishing and hunting
68 = caused town problems
69 = higher cost of housing
70 = ruins the environment

Variable Number	Variable Label and Codes
	71 = law enforcement 72 = utilities 73 = taxes too high 74 = no jobs for local residents 75 = taverns 76 = conflicts between locals and newcomers 77 = health problems 78 = possible non-payment of bills 79 = unhappy about power plant being located in Colstrip
158	LTA HOUSEHOLD'S YEARLY GROSS FAMILY INCOME
167	LTB HOUSEHOLD'S YEARLY GROSS FAMILY INCOME
175	LTC HOUSEHOLD'S YEARLY GROSS FAMILY INCOME
199	NEWCOMER HOUSEHOLD'S YEARLY GROSS FAMILY INCOME
	1 = less than \$2,000 2 = \$2,000-\$3,999 3 = \$4,000-\$5,999 4 = \$6,000-\$7,999 5 = \$8,000-\$9,999 6 = \$10,000-\$11,999 7 = \$12,000-\$13,999 8 = \$14,000-\$15,999 9 = \$16,000-\$17,999 10 = \$18,000-\$19,999 11 = \$20,000-\$21,999 12 = \$22,000-\$23,999 13 = \$24,000-\$25,999 14 = \$26,000-\$27,999 15 = \$28,000-\$29,999 16 = \$30,000-\$31,999 17 = \$32,000-\$33,999 18 = \$34,000-\$35,999 19 = \$36,000-\$37,999 20 = \$38,000-\$39,999 21 = \$40,000 or more
159	LTA's ETHNIC GROUP
168	LTB's ETHNIC GROUP
176	LTC's ETHNIC GROUP
200	NEWCOMER'S ETHNIC GROUP
	1 = Anglo 2 = Hispano 3 = American Indian 4 = Negro 5 = Oriental

Variable Number	Variable Label and Codes
160	LTA's TYPE OF DWELLING
169	LTB's TYPE OF DWELLING
177	LTC's TYPE OF DWELLING
201	NEWCOMER'S TYPE OF DWELLING
	1 = two bedroom single family
	2 = three bedroom single family
	3 = four bedroom single family
	4 = five bedroom single family
	5 = other single family, that is, a single family dwelling with larger rooms, a different style, etc.
	6 = duplex, townhouse, or condominium
	7 = apartment
	8 = mobile home
	9 = other
161	WHETHER LTB EXPECTED THE COMMUNITY TO CHANGE
	1 = yes
	2 = no
162	FIRST WAY LTB EXPECTED COMMUNITY TO CHANGE
163	SECOND WAY LTB EXPECTED COMMUNITY TO CHANGE
171	FIRST WAY LTC EXPECTS COMMUNITY TO CHANGE
172	SECOND WAY LTC EXPECTS COMMUNITY TO CHANGE
	1 = businesses catering to newcomers
	2 = higher cost of living
	3 = increased population
	4 = more city services and facilities
	5 = increased commercial activity
	6 = town overcrowded
	7 = overall community betterment
	8 = increased housing supply
	9 = overall growth of community
	10 = housing shortage
	11 = schools (crowded)
	12 = increased traffic
	13 = law enforcement (ex: more police protection)
	14 = streets and roads
	15 = higher cost for housing
	16 = bring undesirable people
	17 = increased crime
	18 = more buildings
	19 = larger post office
	20 = ruin good farm land
	21 = better medical facilities and more doctors
	22 = an increase in goods and services
	23 = more restaurants
	24 = more churches

Variable Number   Variable Label and Codes

25 = businessmen will take advantage of influx of people
26 = air pollution
27 = more recreation
28 = increased government
29 = higher taxes
30 = worse than expected
31 = increased job opportunities
32 = bring many problems to town
33 = style of living is faster
34 = upswing in local economy
35 = parking problems
36 = newcomers would make changes
37 = change people's life styles
38 = growth is bad if not planned and well-organized
39 = bring more industry
40 = better paying jobs
41 = better shopping facilities
42 = need more water
43 = more power (energy)
44 = better city services at lower rates
45 = increased the work force

164   LTB's COMPARISONS OF ACTUAL AND EXPECTED EFFECTS OF PROJECT

1 = about what was expected
2 = better than expected
3 = worse than expected

170   WHETHER LTC EXPECTS COMMUNITY TO CHANGE WHEN PROJECT BEGINS

1 = yes
2 = no

173   WHETHER LTC FEELS NET EFFECT OF PROJECT WILL BE GOOD OR BAD

1 = good
2 = bad

174   REASON LTC FEELS NET EFFECT OF PROJECT WILL BE GOOD OR BAD

Good Effects:
1 = more services available
2 = better medical facilities and more doctors
3 = progress of town
4 = increased financial benefits for community
5 = increased job opportunities

Variable Number	Variable Label and Codes
	6 = growth is good if controlled
	7 = more commercial facilities
	8 = more attractive town
	9 = people need change
	10 = more industry
	11 = better wages
	12 = bring more power (energy)
	13 = increased population
	Bad Effects:
	50 = enjoys the status quo
	51 = ruin good farm land
	52 = community will be in disorder
	53 = higher taxes
	54 = inadequate city facilities and services
	55 = increase population
	56 = cause city problems
	57 = bring bad odors
	58 = traffic congestion
	59 = air pollution
	60 = bring undesirable people
	61 = increased crime
	62 = lower people's morals
	63 = boom towns are bad
	64 = higher cost of living
	65 = conflicts between people of different cultures
	66 = area would be changed from rural to industrial
	67 = growth of community
	68 = residents will not benefit from project
178	NEWCOMER HOUSEHOLD HEAD'S FIRST REASON FOR NOT BRINGING FAMILY
179	NEWCOMER HOUSEHOLD HEAD'S SECOND REASON FOR NOT BRINGING FAMILY
189	NEWCOMER HOUSEHOLD HEAD'S FIRST REASON FAMILY WAS NOT PRESENT IN PREVIOUS COMMUNITY
190	NEWCOMER HOUSEHOLD HEAD'S SECOND REASON FAMILY WAS NOT PRESENT IN PREVIOUS COMMUNITY
	1 = single at previous address
	2 = military service
	3 = separated from wife
	4 = temporary location
	5 = attending school
	6 = taking care of mother
	7 = wife did not want to come
	8 = children in school
	9 = insufficient housing and cost
	10 = wife wanted to be near family
	11 = no place for animals to live

Variable Number	Variable Label and Codes
180	WHETHER NEWCOMER HOUSEHOLD HEAD PLANS TO BRING FAMILY 1 = plans to bring family 2 = does not plan to bring family
181	WHEN NEWCOMER HOUSEHOLD HEAD PLANS TO BRING FAMILY .1-9.8 = actual time, to the nearest tenth of a year 9.9 = more than 9.85 years
182	LENGTH OF TIME NEWCOMER HOUSEHOLD HEAD LIVED IN COMMUNITY BEFORE FAMILY ARRIVED 0 = brought family with him/her .1-9.8 = actual time, to the nearest tenth of a year 9.9 = more than 9.85 years 9999 = non-response
183	LOCATION OF HOUSEHOLD HEAD'S PREVIOUS JOB All Communities: 61 = South Dakota 62 = Idaho 63 = New Mexico 64 = Arizona 65 = Nevada 66 = West Coast (Washington, Oregon, California) 67 = Midwest (Minnesota, Wisconsin, Illinois, Indiana, Iowa, Kansas, Missouri, Michigan, Ohio) 68 = South (Georgia, Louisiana, Texas, Oklahoma, Tennesse, West Virginia, Virginia, North Carolina, South Carolina, Florida, Mississippi, Arkansas, Alabama, Kentucky) 69 = Northeast 70 = North Central 71 = Other U.S. 72 = Outside U.S. (NOTE: In addition to the above codes which are identical for each community, the codes for towns within the same state as the community and adjacent states differ from one community to another. These codes are listed below by community.

Variable Number | Variable Label and Codes

Colstrip, Montana:

Montana
16 = Billings
17 = other Montana
18 = Libby
19 = Miles City
20 = Butte
21 = Terry
22 = Clancy
23 = Missoula
24 = Great Falls
25 = Glendive
26 = Laurel
27 = Hardin
28 = Livingston
29 = Red Lodge

Wyoming
1 = Sheridan
2 = Rock Springs
3 = Casper

60 = Colorado

North Dakota
31 = other North Dakota
32 = Center
33 = Minot
34 = Bismarck

Idaho
46 = Idaho Falls

Forsyth, Montana:

Montana
16 = Jordan
17 = Billings
18 = Cut Bank
19 = Columbus
20 = Vananda
21 = Rosebud
22 = Livingston
23 = Bozeman
24 = Missoula
25 = Custer
26 = Libby
27 = Helena
28 = Hysham
29 = Melstone
30 = Belgrade
31 = Miles City

Variable Number — Variable Label and Codes

32 = Sidney
33 = Roundup
34 = Troy
35 = Browning
36 = Kalispell
37 = Colstrip
38 = Red Lodge
39 = Glendive
50 = Beach

North Dakota
40 = Hillsboro
41 = Minot
42 = Fargo

Idaho
46 = Lewiston

62 = Nebraska

60 = Colorado

Wyoming
1 = other Wyoming
2 = Casper

Center, North Dakota:

North Dakota
31 = Noonan
32 = Bismarck
33 = Fargo
34 = Williston
35 = Washburn
36 = Stanton
37 = Larsen

South Dakota
46 = Sioux Falls
47 = Aberdeen
48 = Rapid City
49 = Big Stone City

Montana
16 = other Montana
17 = Sidney

Green River, Wyoming:

Wyoming
1 = Laramie
2 = Gillette
3 = Big Piney
4 = Cheyenne

Variable Number	Variable Label and Codes

5 = Green River
6 = Cody
7 = Casper
8 = Rock Springs
9 = Rawlins
10 = Newcastle
11 = Node
12 = Bitter Creek
13 = Superior
14 = Lander
15 = Buffalo
73 = Glenrock
74 = Kemmerer
75 = Cokeville

Colorado
55 = Boulder
56 = Denver
57 = Colorado Springs
58 = Commeres Cody
59 = Jamestown
60 = other Colorado

Utah
43 = Logan
44 = American Fork
45 = Provo
46 = Ogden
47 = Salt Lake City
48 = Duchane
49 = Moab
50 = other Utah

Nebraska
51 = other Nebraska

62 = North Dakota

Montana
16 = Billings
17 = Bozeman
18 = Butte
19 = other Montana
20 = Helena

Idaho
31 = Sun Valley
32 = other Idaho
33 = Suhnon
34 = American Falls

Variable Number	Variable Label and Codes

Rock Springs, Wyoming:

Wyoming
1 = Laramie
2 = Gillette
3 = Big Piney
4 = Cheyenne
5 = Green River
6 = Cody
7 = Casper
8 = Rock Springs
9 = Rawlins
10 = Newcastle
11 = Node
12 = Bitter Creek
13 = Lander
14 = Farson
15 = Riverton
25 = Wheatland
26 = Worland
27 = Jackson Hole
80 = Sundance
81 = La Barge
82 = Kemmerer
83 = Sheriden
84 = Granger
85 = Thermopolis
86 = Glenrock
87 = Cawly
88 = Encampment
89 = Evanston
90 = Zymolin

Montana
16 = Billings
17 = Bozeman
18 = Butte
19 = Kalispell
20 = other Montana

Utah
43 = Price
44 = Woodland
45 = Logan
46 = Ogden
47 = Salt Lake City
48 = Duchane
50 = other Utah
52 = Orem
53 = Provo
54 = Roosevelt
55 = Vernal

Variable Number — Variable Label and Codes

Colorado
40 = Carbondale
41 = Glenwood
42 = Trinidad
56 = Denver
57 = Colorado Springs
58 = Commeres Cody
59 = Jamestown
60 = other Colorado
91 = Golden Colorado
92 = Johnstown
93 = Gunnison
94 = Longmont
95 = Littleton
96 = Greely
97 = Craig
98 = Basalt
99 = Lakewood

51 = Nebraska

Idaho
73 = Blackfoot
74 = Idaho
75 = Montpelier
76 = Twin Falls
77 = Pocatello

31 = North Dakota

186 WHETHER NEWCOMER HOUSEHOLD HEAD DROVE TO WORK IN PREVIOUS COMMUNITY

1 = yes
2 = no

188 WHETHER FAMILY LIVED WITH NEWCOMER HOUSEHOLD HEAD IN PREVIOUS COMMUNITY

1 = lived with household head
2 = did not live with household head

191 REASON NEWCOMER HOUSEHOLD MOVED TO NEW COMMUNITY

1 = for a change
2 = job transfer
3 = better job
4 = job with better pay
5 = job opportunity(ies)
6 = better climate
7 = proximity to family

Variable Number	Variable Label and Codes

8 = school
9 = available housing
10 = available trailer spaces
11 = proximity to job
12 = desire to live in Wyoming
13 = relocated with family
14 = traveling opportunity
15 = desire to live in one of mountain states
16 = desire to work for Bechtel
17 = desire to live out west
18 = wanted to live somewhere other than old community
19 = proximity to friend(s)
20 = only place could find job
21 = company relocated
22 = desire to live in Forsyth
23 = health reasons
24 = like the country and people
25 = desire to live in Montana

192 HOW NEWCOMER HOUSEHOLD HEADS LEARNED ABOUT JOB OPENINGS ON THE MAJOR PROJECTS

1 = talk at local taverns
2 = relatives
3 = union
4 = schooling program
5 = friend(s)
6 = previous employer
7 = newspaper
8 = rumor
9 = placement service
10 = television news report
11 = through household head's employer
12 = traveling through
13 = magazine
14 = inquired into possibility of job (sent resumes)
15 = familiar with area
16 = recruited by company

193 NEWCOMER'S FIRST WORD BEST DESCRIBES COMMUNITY
194 NEWCOMER'S SECOND WORD BEST DESCRIBES COMMUNITY

1 = easy
2 = happy
3 = modern
4 = lonely
5 = competitive
6 = impersonal

Variable Number	Variable Label and Codes
	7 = dull 8 = exciting 9 = conservative 10 = rewarding 11 = unfriendly 12 = isolated 13 = slow moving 14 = difficult 15 = friendly 16 = expensive 17 = relaxed 18 = dirty
195	NEWCOMER'S FIRST THING LIKED ABOUT COMMUNITY
196	NEWCOMER'S SECOND THING LIKED ABOUT COMMUNITY
	1 = better paying job(s) 2 = better job 3 = available jobs 4 = enjoys job 5 = friendly people 6 = good taverns 7 = climate 8 = mountain scenery 9 = churches 10 = local bridge club 11 = available housing 12 = proximity to recreational facilities 13 = outdoor recreation (ex: hunting and fishing) 14 = rural atmosphere 15 = proximity to family and/or home 16 = cost of food 17 = proximity to Salt Lake City 18 = proximity to commercial facilities 19 = clean air 20 = proximity to city services and facilities 21 = conservative area 22 = proximity to national parks and scenic areas 23 = lower housing costs 24 = meeting new people 25 = traveling opportunity in western states 26 = proximity to Bismarck 27 = proximity to job 28 = good public schools 29 = quality of commercial establishments 30 = large number of commercial establishments for small town 31 = enjoy living in Wyoming 32 = progress of town 33 = opportunities for children to obtain part-time jobs

Variable Number	Variable Label and Codes
	34 = good rock collecting
	35 = the reservoir
	36 = surrounding areas (region)
	37 = being away from immediate family
	38 = religious people
	39 = not knowing everybody's personal life
	40 = liquor stores (as compared to dry Utah)
	41 = medical services
	42 = proximity to trails for riding dirt bike
	43 = location of Rock Springs
	44 = aesthetic beauty of Rock Springs
	45 = bowling
	46 = friends
	47 = college
	48 = total environment
	49 = entertainment and amusement
	50 = amount of sunshine
	51 = healthy place to live
	52 = their house
	53 = being away from relatives
	54 = recreational activities for children
	55 = no state income tax
	56 = vegetation
	57 = different experience
	58 = proximity to government owned land
	59 = mayor of town has done outstanding job
	60 = proximity to friends
	61 = proximity to mountains
	62 = proximity to cities
	63 = quiet, slow, and easy living
	64 = clean town
	65 = young people
	66 = community activities
	67 = good place to raise children
	68 = desire to live in Forsyth
	69 = laundry facilities
	70 = good food
	71 = quality of housing
	72 = scenery
	73 = less noise
	74 = traffic
	75 = lower cost of living
	76 = being away from ex-wife
	77 = proximity to Billings

Variable Number	Variable Label and Codes
197	NEWCOMER'S FIRST THING DISLIKED ABOUT COMMUNITY
198	NEWCOMER'S SECOND THING DISLIKED ABOUT COMMUNITY

1 = unavailable housing
2 = quality of housing
3 = unfriendly people
4 = crime and violence
5 = sanitation
6 = high cost of living
7 = climate
8 = lack of friends
9 = commercial facilities (ex: lack of)
10 = no recreational activities for teenagers
11 = town overcrowded
12 = facilities for dining and dancing
13 = too many salesmen who claim to be taking surveys
14 = streets and roads
15 = town depressing and/or not clean (dirty)
16 = inadequate city services and facilities
17 = lack of family recreational activities
18 = schools
19 = not enough single women
20 = lack of green vegetation and trees
21 = rural atmosphere
22 = distance from family
23 = no graduate program in area
24 = prostitution
25 = medical facilities and lack of doctors
26 = lack of recreation for children
27 = lack of entertainment and amusement
28 = unavailability of teaching positions
29 = law enforcement
30 = distance from job
31 = high cost of food
32 = too conservative
33 = traffic congestion
34 = influx of people
35 = community in general (environment)
36 = taverns and casinos
37 = movies
38 = topography (or landscape)
39 = high cost of housing
40 = inadequate city government
41 = growth is impersonal
42 = need golf course
43 = television and radio
44 = sports facilities
45 = inadequate public transportation
46 = inadequate trailer facilities and services
47 = dust

Variable Number	Variable Label and Codes
	48 = need fast food hamburger restaurants
	49 = unfriendly merchants
	50 = wind
	51 = recreational activities for young adults
	52 = transiency of people
	53 = people's lack of pride in town
	54 = no supply stores for sheet metal business
	55 = faster tempo of life since boom
	56 = people's driving habits
	57 = town is ugly and bleak
	58 = lack of variety in goods and services
	59 = people are money-hungry
	60 = lack of physical planning
	61 = liquor
	62 = drug use
	63 = railroad crossings (out of repair)
	64 = wife has difficulty finding a job
	65 = too many trailers
	66 = phone company
	67 = scenery
	68 = lack of good book store
	69 = wages
	70 = water quality
	71 = lack of available land
	72 = businesses' hours too short
	73 = growth rate of town
	74 = difficulty meeting new people
	75 = postal service
	76 = lack of community activities
	77 = lack of repairmen
	78 = auto repair service
	79 = better restaurants
	80 = pay rate for non-construction
	81 = not modern
	82 = snakes
	83 = distance from large city
	84 = lack of political activity
	85 = noise pollution
	86 = standard of living
	87 = coal mine
	88 = bad odors
	89 = insects (mosquitoes)
	90 = no one to help with yard work
	91 = cottonwood trees
	92 = distance from children
	93 = construction workers

b. Variables Which May Be Derived From the Raw Data

Characteristics of the respondents were not asked for directly whenever they could be derived from the answers to questions already included. However, users may generate these variables. For example, the respondents were asked their monthly expenditures for several categories, and the percentage of these expenditures which are local. The actual value of the local expenditures by category may be obtained by multiplying the percentage local by the total. The total monthly local expenditures may be generated by adding together all those results. Similar arithmetic procedures may be used to obtain family size, monthly take-home pay, monthly gross family income, percentage of take-home pay spent locally, whether the household head changed occupation with a change in job, etc. Users are encouraged to examine the variables carefully for manipulations that may provide additional desired information.

2. Household Survey Revised Data

A second and smaller data set of 122 variables was created from the Household Survey primary data base for analytic purposes. Variables were selected on the basis of their importance for the CONSTRUCTION WORKER PROFILE: FINAL REPORT and for the COMMUNITY REPORTS. In order that the data summaries be as clear as possible without the loss of significant information, three types of changes were made, each of which is discussed below.

a. Grouping of Variables

The variables of the primary data base are stored in the order in which they appeared on the questionnaire, in some cases separating related variables from each other. Variables of related topics were grouped together in the revised data set in order to eliminate time-consuming searches. The resulting order of variables and the new number assigned to each are given in the Revised Variable Identification List on page 94 of this section.

b. Grouping and Recoding of Values

There exists a very large number of possible answers to several of the questions on the Household Survey questionnaire. Some examples are the answers to the questions on age, expenditures, and take-home pay. The possible answers to these questions could have been grouped into a small number of mutually exclusive and exhaustive classes before the questionnaire was administered. However, because it could not be known what the distributions of the actual answers were likely to be, the potential answers were not categorized until some of the data had been analyzed.

When categorizing the data, three objectives were kept in mind. First, the size of the class intervals should be relatively small, subject to the restriction that there be no more than 25 classes. To have more than 25 classes would, it was felt, undermine the advantages of using grouped as opposed to ungrouped data. Second, a relatively small number of observations should fall into the highest class. A large number of observations in the highest class would indicate that the data had been truncated too severely. Finally, and most important, the coded values for the variables should be such that the values of the mean, median, mode, and standard deviation would not be severely affected by the coding. This meant that every value in each class had to be assigned a value equal to the midpoint for that class.

Responses to the open-ended questions were assigned a value as each response was encountered by the coder. In several instances, similar but not identical responses were given separate codes so that precise information would not be lost. For the purpose of data analysis, however, a large number of unordered values with some repetition is much more difficult to comprehend than a small list of distinctly different values. The values for open-ended questions were diminished in number by recoding all values with similar meanings into one code and introducing an "other" category for single responses. For example, the responses for Variable 102, "First Reason Long Time Resident is Glad or Unhappy Project Came," included five values which described different negative aspects of the new people who arrived with the construction of the project. In the revised data set all of these values were recoded as 18, "Worse than Expected--Undesirable Newcomers." Similar procedures were used for other open-ended questions. The new codes are given in the Revised Value List on page 101 of this section.

c. Computed Variables

As described in the previous section, some variables may be computed from those collected in the survey. Several of these variables were used in the CONSTRUCTION WORKER PROFILE: FINAL REPORT or will be helpful to users of the data summaries. For example, family size was not specifically requested during the interview and does not appear in the primary data set. It does appear, however, in the revised data. It was computer-generated by adding together the household head, the spouse, and the number of children living at home.

The variables which are not found in the primary data set but were computer-generated are the following: Variables 5-14, 38, 41, 59, 60, 77, 80, 83, 86, and 89-96. The procedures by which they were computed are given in the Computed Variables List.

d. Revised Variable and Value Identification Lists

Descriptions of the variables which are included in the revised data set, their revised and original numbers, and their placement on the computer cards are given in the Revised Variable Identification List. It should be noted that the format for the revised data is 9F8.2 on each of 14 cards. The questionnaire number and the number of the card within that questionnaire are given in the last five columns of each card.

The Revised Value Identification List gives all the codes for the variables of the revised data set. The variables are identified by number and 40-character label, and the variable number of the original data set is given. Those variables with identical codes are listed together. The original codes are given in Column 2 for values which are the combination of two or more original codes; thus, users may know the specific responses that make up a value. The original codes are not given if they have not been changed for the revised set. Location of variables on the cards can be found by reference to the Revised Variable Identification List.

COMPUTED VARIABLES LIST

Revised Variable Number	Variable Label and Computation (using variable numbers of primary data set)
5	NUMBER OF PERSONS IN FAMILY
6	NUMBER OF CHILDREN LESS THAN 5 YEARS OLD
7	NUMBER OF CHILDREN 5 THROUGH 11 YEARS OLD
8	NUMBER OF CHILDREN 12 THROUGH 14 YEARS OLD
9	NUMBER OF CHILDREN 15 THROUGH 17 YEARS OLD
10	NUMBER OF CHILDREN 18 THROUGH 19 YEARS OLD
11	NUMBER OF CHILDREN 20 THROUGH 24 YEARS OLD
12	NUMBER OF CHILDREN 25 THROUGH 29 YEARS OLD
13	NUMBER OF CHILDREN 30 THROUGH 34 YEARS OLD
14	NUMBER OF CHILDREN 35 THROUGH 39 YEARS OLD
	To count children by age, Variables 7, 12, 17, 19, 22, 24, 27, 29, 32, 34, 37, 39, 42, and 44 were checked first for the relationship of household members and secondly for age. For computation of Family Size (Variable 5), only relationship was checked and household head, spouse, and children were added.
38	WHETHER SPOUSE OF HOUSEHOLD HEAD WORKS
	Variables 53, 60, and 67 were checked for relationship. If any of the workers was a spouse, the code for this variable was made equal to 1.
41	WHETHER OTHER HOUSEHOLD MEMBERS WORK
	Variables 53, 60, and 67 were checked. If any of these household members was not a spouse, the value for this variable is 1.
48	DISTANCE HOUSEHOLD HEAD TRAVELS TO WORK
	V74 + V78
49	TIME IT TAKES HOUSEHOLD HEAD TO TRAVEL TO WORK
	V75 + V78
58	RESPONDENT'S PRESENT HOME TYPE
	V160 + V169 + V177 + V201

Revised Variable Number	Variable Label and Computation (using variable numbers of primary data set)
59	TYPE OF HOUSING ALL RESPONDENTS PREFER Preferred type of housing is the respondent's present type if (s)he is satisfied with residence. If respondent is dissatisfied, preferred housing is derived from Variable 95.
60	TYPE OF HOUSING ALL RESPONDENTS DEMAND Present type of housing is the type demanded for satisfied respondents. If dissatisfied respondents were both willing and able to buy their preferred type of house--that is, if Variable 96 equals 1, 7, or 9--the respondent's preferred housing type was treated as a demand.
75	MONTHLY EXPENDITURES FOR UTILITIES $V120 + V122 + V124 + V126$
76	TOTAL MONTHLY EXPENDITURES FOR AUTO $V128 + V130$
77	LOCAL MONTHLY EXPENDITURES FOR AUTO $\frac{(V128 \cdot V129) + (V130 \cdot V131)}{100}$
78	PERCENTAGE OF AUTO EXPENDITURES THAT IS LOCAL $\frac{(V128 \cdot V129) + (V130 \cdot V131)}{V128 + V130}$
79	TOTAL MONTHLY EXPENDITURES FOR INSURANCE AND HEALTH SERVICES $V132 + V134 + V136$
80	LOCAL MONTHLY EXPENDITURES FOR INSURANCE AND HEALTH $\frac{V132 \cdot V133}{100}$
81	PERCENTAGE OF INSURANCE AND HEALTH EXPENDITURES THAT IS LOCAL $\frac{V132 \cdot V133}{V132 + V134 + V136}$

Revised Variable Number	Variable Label and Computation (using variable numbers of primary data set)
83	LOCAL MONTHLY EXPENDITURES FOR GROCERIES $\frac{V138 \cdot V139}{100}$
84	PERCENTAGE OF GROCERY EXPENDITURES THAT IS LOCAL $\frac{V138 \cdot V139}{V138}$
85	TOTAL MONTHLY EXPENDITURES FOR AMUSEMENT, TRAVEL, MISCELLANEOUS $V140 + V142 + V144$
86	LOCAL MONTHLY EXPENDITURES FOR AMUSEMENT, TRAVEL, MISCELLANEOUS $\frac{(V140 \cdot V141) + (V144 \cdot V145)}{100}$
87	PERCENTAGE OF EXPENDITURES FOR AMUSEMENT, TRAVEL, MISCELLANEOUS THAT IS LOCAL $\frac{(V140 \cdot V141) + (V144 \cdot V145)}{V140 + V142 + V144}$
89	TOTAL MONTHLY EXPENDITURES AND SAVINGS $V118 + V120 + V122 + V124 + V126 + V128 + V130 + V132 + V134 + V136 + V138 + V140 + V142 + V144 + V146$
90	TOTAL LOCAL MONTHLY EXPENDITURES $\frac{(V128 \cdot V129) + (V130 \cdot V131) + (V132 \cdot V133) + (V138 \cdot V139) + (V140 \cdot V141) + (V144 + V145)}{100}$
91	ANNUAL GROSS FAMILY INCOME $V158 + V167 + V175 + V199$
92	MONTHLY GROSS FAMILY INCOME $\frac{V158 + V167 + V175 + V199}{12}$

Revised Variable Number	Variable Label and Computation (using variable numbers of primary data set)
93	MONTHLY FAMILY TAKE-HOME PAY $V149 \cdot 4.333333 \cdot 10$
94	PERCENTAGE OF INCOME ACCOUNTED FOR (NOTE: Variable numbers refer to the revised data set in order to avoid repetition and simplify computation.) $\frac{V89}{V92} \cdot 100$
95	PERCENTAGE OF INCOME SPENT (NOTE: Variable numbers refer to the revised data set in order to avoid repetition and simplify computation.) $\frac{V74 + V75 + V76 + V79 + V82 + V85}{V92} \cdot 100$
96	PERCENTAGE OF INCOME SPENT LOCALLY (NOTE: Variable numbers refer to the revised data set in order to avoid repetition and simplify computation.) $\frac{V90}{V92} \cdot 100$

REVISED VARIABLE IDENTIFICATION LIST

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
1	1-8	1	1	Study community
1	9-16	2	2	Length of time household head has lived in study community
1	17-24	3	3	Whether household head's family is present
1	25-32	4	4	Number of persons in household
1	33-40	5	computed	Number of persons in family
1	41-48	6	computed	Number of children less than 5 years old
1	49-56	7	computed	Number of children 5 through 11 years old
1	57-64	8	computed	Number of children 12 through 14 years old
1	65-72	9	computed	Number of children 15 through 17 years old
2	1-8	10	computed	Number of children 18 through 19 years old
2	9-16	11	computed	Number of children 20 through 24 years old
2	17-24	12	computed	Number of children 25 through 29 years old
2	25-32	13	computed	Number of children 30 through 34 years old
2	33-40	14	computed	Number of children 35 through 39 years old
2	41-48	15	9	Age of household head
2	49-56	16	10	Education of household head
2	57-64	17	11	Marital status of household head
2	65-72	18	14	Age of spouse
3	1-8	19	15	Education of spouse
3	9-16	20	16	Marital status of spouse
3	17-24	21	19	Age of household member #3
3	25-32	22	20	Education of household member #3
3	33-40	23	24	Age of household member #4
3	41-48	24	25	Education of household member #4

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
3	49-56	25	29	Age of household member #5
3	57-64	26	30	Education of household member #5
3	65-72	27	34	Age of household member #6
4	1-8	28	35	Education of household member #6
4	9-16	29	39	Age of household member #7
4	17-24	30	40	Education of household member #7
4	25-32	31	44	Age of household member #8
4	33-40	32	45	Education of household member #8
4	41-48	33	47	Household head's principal occupation
4	49-56	34	48	Household head's industry type
4	57-64	35	50	Household head's previous occupation
4	65-72	36	51	Household head's previous industry type
5	1-8	37	52	Reason household head changed jobs
5	9-16	38	computed	Whether spouse of household head works
5	17-24	39	54	Spouse's principal occupation
5	25-32	40	55	Spouse's industry type
5	33-40	41	computed	Whether other household members work
5	41-48	42	60	Relationship of worker #3 to household head
5	49-56	43	61	Occupation of worker #3
5	57-64	44	62	Industry type of worker #3
5	65-72	45	67	Relationship of worker #4 to household head
6	1-8	46	68	Occupation of worker #4
6	9-16	47	69	Industry type of worker #4
6	17-24	48	computed	Distance household head travels to work
6	25-32	49	computed	Time it takes household head to travel to work
6	33-40	50	89	First mentioned way most of respondent's best friends were met
6	41-48	51	90	Second mentioned way most of respondent's best friends were met

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
6	49-56	52	91	Third mentioned way most of respondent's best friends were met
6	57-64	53	92	Whether household head owns or rents home
6	65-72	54	93	Number of bedrooms in home
7	1-8	55	94	Respondent's satisfaction with present type of housing
7	9-16	56	95	Type of housing dissatisfied respondent prefers
7	17-24	57	96	Primary reason respondent is not living in preferred housing type
7	25-32	58	computed	Respondent's present home type
7	33-40	59	computed	Type of housing all respondents prefer
7	41-48	60	computed	Type of housing all respondents demand
				(NOTE: A respondent was not considered to have a demand for his/her preferred housing type unless (s)he was both willing and able to purchase that type of house.)
7	49-56	61	98	Respondent's plans for staying in area
7	57-64	62	99	Respondent's satisfaction with law enforcement
7	65-72	63	100	Respondent's satisfaction with fire protection
8	1-8	64	101	Respondent's satisfaction with water supply
8	9-16	65	102	Respondent's satisfaction with sewer service
8	17-24	66	103	Respondent's satisfaction with garbage collection
8	25-32	67	104	Respondent's satisfaction with streets and roads
8	33-40	68	105	Respondent's satisfaction with medical services
8	41-48	69	108	Respondent's satisfaction with amusements

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
8	49-56	70	109	Respondent's satisfaction with shopping facilities
8	57-64	71	112	Respondent's satisfaction with schools
8	65-72	72	114	Respondent's satisfaction with housing availability
9	1-8	73	115	Respondent's satisfaction with housing quality
9	9-16	74	118	Total monthly expenditures for housing
9	17-24	75	computed	Total monthly expenditures for utilities
9	25-32	76	computed	Total monthly expenditures for auto
9	33-40	77	computed	Local monthly expenditures for auto
9	41-48	78	computed	Percentage of auto expenditures that is local
9	49-56	79	computed	Total monthly expenditures for insurance payments and medical services
9	57-64	80	computed	Local monthly expenditures for insurance payments and medical services
9	65-72	81	computed	Percentage of insurance and medical expenditures that is local
10	1-8	82	138	Total monthly expenditures for groceries
10	9-16	83	computed	Local monthly expenditures for groceries
10	17-24	84	computed	Percentage of grocery expenditures that is local
10	25-32	85	computed	Total monthly expenditures for amusements, travel, and miscellaneous
10	33-40	86	computed	Local monthly expenditures for amusements, travel, and miscellaneous
10	41-48	87	computed	Percentage of expenditures for amusements, travel, and miscellaneous that is local

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
10	49-56	88	146	Total monthly savings
10	57-64	89	computed	Total monthly expenditures and savings
10	65-72	90	computed	Total local monthly expenditures
11	1-8	91	computed	Annual gross family income
11	9-16	92	computed	Monthly gross family income
11	17-24	93	computed	Monthly family take-home pay
11	25-32	94	computed	Percentage of income accounted for
11	33-40	95	computed	Percentage of income spent
11	41-48	96	computed	Percentage of income spent locally
11	49-56	97	150	Whether respondent is long time resident, newcomer, or unclassifiable
11	57-64	98	151	Long time resident (A) comparison of actual and expected effects of the construction project on the community
11	65-72	99	152	First mentioned way long time resident (A) feels actual effects have been better or worse than expected
12	1-8	100	153	Second mentioned way long time resident (A) feels actual effects have been better or worse than expected
12	9-16	101	155	Whether long time resident (A) is glad or unhappy project came
12	17-24	102	156	First reason long time resident (A) is glad or unhappy the construction project came
12	25-32	103	157	Second reason long time resident (A) is glad or unhappy the construction project came
12	33-40	104	161	Whether long time resident (B) expected the community to change when the site began to be built
12	41-48	105	162	First way long time resident (B) expected the community to change

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
12	49-56	106	163	Second way long time resident (B) expected the community to change
12	57-64	107	164	Long time resident (B) comparison of the actual and expected effects of the construction project
12	65-72	108	165	First mentioned way long time resident (B) feels actual effects have been better or worse than expected
13	1-8	109	166	Second mentioned way long time resident (B) feels actual effects have been better or worse than expected
13	9-16	110	170	Whether long time resident (C) expects community to change when the site begins to be built
13	17-24	111	171	First mentioned way long time resident (C) expects the community to change
13	25-32	112	172	Second mentioned way long time resident (C) expects the community to change
13	33-40	113	173	Whether long time resident (C) feels the net effect of the construction project will be good or bad for the community
13	41-48	114	174	Primary reason the long time resident (C) feels the net effect of the construction project will be good or bad
13	49-56	115	183	Location of newcomer household head's last job before coming into area
13	57-64	116	191	Primary reason newcomer household head moved into new community
13	64-72	117	193	Newcomer respondent's first selected word that best describes the community as a place to live
14	1-8	118	194	Newcomer respondent's second selected word that best describes the community as a place to live

Card Number	Column Numbers	Variable Number	Original Variable Number	Variable Description
14	9-16	119	195	Newcomer respondent's first mentioned thing liked most about living in community
14	17-24	120	196	Newcomer respondent's second mentioned thing liked most about living in community
14	25-32	121	197	Newcomer respondent's first mentioned thing liked least about living in community
14	33-40	122	198	Newcomer respondent's second mentioned thing liked least about living in community

REVISED VALUE IDENTIFICATION LIST

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
1	1	STUDY COMMUNITY 1 = Green River 2 = Rock Springs 4 = Conrad 5 = Colstrip 6 = Forsyth 7 = Killdeer 8 = Center 9 = Langdon 10 = St. George	
2	2	LENGTH OF TIME IN STUDY COMMUNITY .25 = less than 6 months .75 = 6 months to 1 year 1.5 = 1 to 2 years 2.5 = 2 to 3 years 4.0 = 3 through 5 years 7.5 = 6 through 9 years 12.0 = 10 through 14 years 17.0 = 15 through 19 years 22.0 = 20 years 0 = indefinitely 9999 = non-response	
3	3	WHETHER HOUSEHOLD HEAD'S FAMILY IS PRESENT 1 = family present 2 = family absent 3 = one person family (not applicable)	
4	4	NUMBER OF PERSONS IN HOUSEHOLD 1-8 = actual number of persons 9 = 9 or more persons	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
5	computed	NUMBER OF PERSONS IN FAMILY	
6	computed	NUMBER OF CHILDREN LESS THAN 5 YEARS OLD	
7	computed	NUMBER OF CHILDREN 5 THROUGH 11 YEARS OLD	
8	computed	NUMBER OF CHILDREN 12 THROUGH 14 YEARS OLD	
9	computed	NUMBER OF CHILDREN 15 THROUGH 17 YEARS OLD	
10	computed	NUMBER OF CHILDREN 18 THROUGH 19 YEARS OLD	
11	computed	NUMBER OF CHILDREN 20 THROUGH 24 YEARS OLD	
12	computed	NUMBER OF CHILDREN 25 THROUGH 29 YEARS OLD	
13	computed	NUMBER OF CHILDREN 30 THROUGH 34 YEARS OLD	
14	computed	NUMBER OF CHILDREN 35 THROUGH 39 YEARS OLD	
		value = actual number of persons	
15	9	AGE OF HOUSEHOLD HEAD	
18	14	AGE OF SPOUSE	
21	19	AGE OF HOUSEHOLD MEMBER #3	
23	24	AGE OF HOUSEHOLD MEMBER #4	
25	29	AGE OF HOUSEHOLD MEMBER #5	
27	34	AGE OF HOUSEHOLD MEMBER #6	
29	39	AGE OF HOUSEHOLD MEMBER #7	
31	44	AGE OF HOUSEHOLD MEMBER #8	
		2 = 4 years old or younger	
		8 = 5 through 11 years old	
		13 = 12 through 14 years old	
		16 = 15 through 17 years old	
		18.5 = 18 through 19 years old	
		22 = 20 through 24 years old	
		27 = 25 through 29 years old	
		32 = 30 through 34 years old	
		37 = 35 through 39 years old	
		42 = 40 through 44 years old	
		47 = 45 through 49 years old	
		52 = 50 through 54 years old	
		57 = 55 through 59 years old	
		62 = 60 through 64 years old	
		67 = 65 through 69 years old	
		72 = 70 through 74 years old	
		77 = 75 through 79 years old	
		82 = 80 through 84 years old	
		87 = 85 through 89 years old	
		92 = 90 through 94 years old	
		97 = 95 years old or older	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
16	10	EDUCATION OF HOUSEHOLD HEAD	
19	15	EDUCATION OF SPOUSE	
22	20	EDUCATION OF HOUSEHOLD MEMBER #3	
24	25	EDUCATION OF HOUSEHOLD MEMBER #4	
26	30	EDUCATION OF HOUSEHOLD MEMBER #5	
28	35	EDUCATION OF HOUSEHOLD MEMBER #6	
30	40	EDUCATION OF HOUSEHOLD MEMBER #7	
32	45	EDUCATION OF HOUSEHOLD MEMBER #8	
		1 = less than high school graduate 2 = high school graduate 3 = some college but no bachelors degree 4 = college graduate 5 = some graduate school but no advanced degree 6 = advanced degree 7 = vocational or technical school	
17	11	MARITAL STATUS OF HOUSEHOLD HEAD	
20	16	MARITAL STATUS OF SPOUSE	
		1 = now married 2 = widowed or divorced 3 = never married	
33	47	HOUSEHOLD HEAD'S PRINCIPAL OCCUPATION	
		Construction Employment: 1 = professional, technical, and kindred 2 = supervisory 3 = craftsmen and kindred 4 = operatives except transport 5 = transport equipment operatives 6 = laborers	
		Non-Construction Employment: 7 = professional, technical, and kindred 8 = managerial 9 = sales 10 = craftsmen, foremen, and kindred 11 = clerical and kindred 12 = operatives except transport 13 = transport equipment operatives 14 = laborers except farm 15 = farmers, farm foremen, farm laborers	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		16 = service workers except private household	
		17 = private household workers	
		18 = retired	
		19 = housewives	
		20 = student	
		21 = armed services	
35	50	HOUSEHOLD HEAD'S PREVIOUS OCCUPATION	
39	54	SPOUSE'S PRINCIPAL OCCUPATION	
43	61	OCCUPATION OF WORKER #3	
46	68	OCCUPATION OF WORKER #4	
		Construction Employment:	
		1 = professional, technical, and kindred	
		2 = supervisory	
		3 = craftsmen and kindred	
		4 = operatives except transport	
		5 = transport equipment operatives	
		6 = laborers	
		Non-Construction Employment:	
		7 = professional, technical, and kindred	
		8 = managerial	
		9 = sales	
		10 = craftsmen, foremen, and kindred	
		11 = clerical and kindred	
		12 = operatives except transport	
		13 = transport equipment operatives	
		14 = laborers except farm	
		15 = farmers, farm foremen, farm laborers	
		16 = service workers except private household	
		17 = private household workers	
		18 = retired	
		19 = housewives	
		20 = other non-construction employment	
		21 = student	
		22 = armed services	
34	48	HOUSEHOLD HEAD'S INDUSTRY TYPE	
		1 = agriculture, forestry, fisheries	
		2 = mining	
		3 = construction: Colstrip 1,2	
		4 = construction: Center 2	
		5 = construction: Jim Bridger 2,3	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		6 = construction: Texas Gulf Sulfur Plant	
		7 = construction: Texas Gulf Sulfur Mine	
		8 = other energy-related construction	
		9 = non-energy-related construction	
		10 = manufacturing	
		11 = transportation, communications, or utilities	
		12 = wholesale trade	
		13 = retail trade	
		14 = finance, insurance, real estate	
		15 = personal services	
		16 = health and recreation	
		17 = professional and educational services	
		18 = public administration	
		19 = armed forces	
		20 = other	
		21 = student	
		22 = retired	
		23 = unemployed	
36	51	HOUSEHOLD HEAD'S PREVIOUS INDUSTRY TYPE	
40	55	SPOUSE'S INDUSTRY TYPE	
44	62	INDUSTRY TYPE OF WORKER #3	
47	69	INDUSTRY TYPE OF WORKER #4	
		1 = agriculture, forestry, fisheries	
		2 = mining	
		3 = construction: Colstrip 1,2	
		4 = construction: Center 2	
		5 = construction: Jim Bridger 2,3	
		6 = construction: Texas Gulf Sulfur Plant	
		7 = construction: Texas Gulf Sulfur Mine	
		8 = other energy-related construction	
		9 = non-energy-related construction	
		10 = manufacturing	
		11 = transportation, communications, or utilities	
		12 = wholesale trade	
		13 = retail trade	
		14 = finance, insurance, real estate	
		15 = personal services	
		16 = health and recreation	
		17 = professional and educational services	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		18 = public administration	
		19 = other industry	
		20 = retired	
		21 = student	
		22 = armed forces	
		23 = unemployed	
37	52	REASON HOUSEHOLD HEAD CHANGED JOBS	
		1 = job with better pay	(3)
		2 = more satisfying job	(4)
		3 = job transfer	(5,2,16, 26,28)
		4 = only place could find a job	(6)
		5 = job with better security	(14)
		6 = previous job terminated	(15)
		7 = retired	(22)
		8 = other job-related	(9,11,13, 20,23,25, 31,33,38)
		9 = desire to live in the area	(7,24,27, 32,37,39, 40)
		10 = desire to live near family and friends	(18,34)
		11 = other	(1,8,10, 12,17,19, 21,29,30, 35,36)
38	computed	WHETHER SPOUSE OF HOUSEHOLD HEAD WORKS	
41	computed	WHETHER OTHER HOUSEHOLD MEMBERS WORK	
104	161	WHETHER LTA EXPECTED COMMUNITY TO CHANGE	
110	170	WHETHER LTC EXPECTS COMMUNITY TO CHANGE	
		1 = yes	
		2 = no	
42	60	RELATIONSHIP OF WORKER #3 TO HOUSEHOLD HEAD	
45	67	RELATIONSHIP OF WORKER #4 TO HOUSEHOLD HEAD	
		1 = household head	
		2 = spouse of household head	
		3 = child of household head	
		4 = other relative of household head	
		5 = roomer, boarder, or lodger	
		6 = other person unrelated to household head	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
48	computed	DISTANCE HOUSEHOLD HEAD TRAVELS TO WORK	
		0 = works in home 5 = fewer than 10 miles 15 = 10-19 miles 25 = 20-29 miles 35 = 30-39 miles 45 = 40-49 miles 55 = 50-59 miles 65 = 60-69 miles 75 = 70-79 miles 85 = 80 miles or more 9999 = non-response or not applicable	
49	computed	TIME IT TAKES HOUSEHOLD HEAD TO TRAVEL TO WORK	
		7.5 = fewer than 15 minutes 22.5 = 15 to 29 minutes 37.5 = 30 to 44 minutes 52.5 = 45 to 59 minutes 67.5 = 60 to 74 minutes 82.5 = 75 to 90 minutes 97.5 = more than 90 minutes	
50	89	FIRST WAY MOST OF RESPONDENT'S FRIENDS WERE MET	
51	90	SECOND WAY MOST OF RESPONDENT'S FRIENDS WERE MET	
52	91	THIRD WAY MOST OF RESPONDENT'S FRIENDS WERE MET	
		1 = at work 2 = at church 3 = at local bars 4 = at clubs or community activities 5 = at recreation activities 6 = through relatives 7 = in respondent's neighborhood 8 = at school 9 = other	
53	92	WHETHER HOUSEHOLD HEAD OWNS HOME	
		1 = own 2 = rent	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
54	93	NUMBER OF BEDROOMS IN HOME	
		1-8 = actual number of bedrooms 9 = 9 or more bedrooms	
55	94	RESPONDENT'S SATISFACTION WITH PRESENT HOME	
		1 = present type satisfactory 2 = different type preferable	
56	95	TYPE OF HOME DISSATISFIED RESPONDENTS PREFER	
58	computed	RESPONDENT'S PRESENT HOME TYPE	
59	computed	TYPE OF HOME ALL RESPONDENTS PREFER	
60	computed	TYPE OF HOME ALL RESPONDENTS DEMAND	
		1 = two bedroom single family 2 = three bedroom single family 3 = four bedroom single family 4 = five bedroom single family 5 = other single family, that is, a single family dwelling with larger rooms, a different style, etc. 6 = duplex, townhouse, or condominium 7 = apartment 8 = mobile home 9 = other	
61	98	RESPONDENT'S PLANS FOR STAYING IN AREA	
		1 = plan to settle down here 2 = plan to leave immediately 3 = plan to stay as long as work is available 4 = uncertain 5 = plan to leave at retirement 6 = plan to stay until transferred 7 = other	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
62	99	RESPONDENT'S SATISFACTION WITH LAW ENFORCEMENT	
63	100	RESPONDENT'S SATISFACTION WITH FIRE PROTECTION	
64	101	RESPONDENT'S SATISFACTION WITH WATER SUPPLY	
65	102	RESPONDENT'S SATISFACTION WITH SEWER SERVICE	
66	103	RESPONDENT'S SATISFACTION WITH GARBAGE COLLECTION	
67	104	RESPONDENT'S SATISFACTION WITH STREETS AND ROADS	
68	105	RESPONDENT'S SATISFACTION WITH MEDICAL SERVICES	
69	108	RESPONDENT'S SATISFACTION WITH AMUSEMENTS	
70	109	RESPONDENT'S SATISFACTION WITH SHOPPING FACILITIES	
71	112	RESPONDENT'S SATISFACTION WITH SCHOOLS	
72	114	RESPONDENT'S SATISFACTION WITH HOUSING AVAILABILITY	
73	115	RESPONDENT'S SATISFACTION WITH HOUSING QUALITY	
		1 = very satisfied 2 = satisfied 3 = uncertain 4 = dissatisfied 5 = very dissatisfied 6 = no service	
75	computed	MONTHLY EXPENDITURES FOR UTILITIES	
78	computed	PERCENTAGE AUTO EXPENDITURES THAT IS LOCAL	
80	computed	LOCAL MONTHLY EXPENDITURES FOR INSURANCE AND HEALTH	
81	computed	PERCENTAGE OF INSURANCE AND MEDICAL EXPENDITURES THAT IS LOCAL	
84	computed	PERCENTAGE OF GROCERY EXPENDITURES THAT IS LOCAL	
87	computed	PERCENTAGE OF EXPENDITURES FOR AMUSEMENT, TRAVEL, MISCELLANEOUS THAT IS LOCAL	
94	computed	PERCENTAGE OF INCOME ACCOUNTED FOR	
95	computed	PERCENTAGE OF INCOME SPENT	
96	computed	PERCENTAGE OF INCOME SPENT LOCALLY	
		Codes are the midpoints of intervals of 5 from 1 to 150, e.g., 3 = 1 to 5 153 = more than 150	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
76	computed	TOTAL MONTHLY EXPENDITURES FOR AUTO	
77	computed	LOCAL MONTHLY EXPENDIUTRES FOR AUTO	
79	computed	TOTAL MONTHLY EXPENDITURES FOR INSURANCE AND HEALTH	
86	computed	LOCAL MONTHLY EXPENDITURES FOR AMUSEMENT, TRAVEL, MISCELLANEOUS	
		Codes are the midpoints of intervals of 10, e.g., 5 = 1 to 10, 15 = 11 to 20 195 = more than 190	
74	118	MONTHLY EXPENDITURES FOR HOUSING	
85	computed	TOTAL MONTHLY EXPENDITURES FOR AMUSEMENT, TRAVEL, MISCELLANEOUS	
88	146	TOTAL MONTHLY SAVINGS	
		Codes are the midpoints of intervals of 15 from 1 to 285, e.g., 8 = 1 to 15, 23 = 16 to 30 293 = more than 285	
82	138	TOTAL MONTHLY EXPENDITURES FOR GROCERIES	
83	computed	LOCAL MONTHLY EXPENDITURES FOR GROCERIES	
		Codes are the midpoints of intervals of 25 from 1 to 475, e.g., 13 = 1 to 25 488 = more than 475	
90	computed	TOTAL LOCAL MONTHLY EXPENDITURES	
		Codes are the midpoints of intervals of 50, e.g., 25 = 1 to 50 975 = more than 950	
89	computed	TOTAL MONTHLY EXPENDITURES AND SAVINGS	
92	computed	MONTHLY GROSS FAMILY INCOME	
93	computed	MONTHLY FAMILY TAKE-HOME PAY	
		Codes are the midpoints of intervals of 100, e.g., 50 = 1 to 100 2950 = more than 2900	
91	computed	ANNUAL GROSS FAMILY INCOME	
		Codes are the midpoints of intervals of 2000, e.g., 1000 = 1 to 1999 41,000 = 40,000 or more	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
97	150	WHETHER RESPONDENT IS LONG TIME RESIDENT OR NEWCOMER	
		1 = long time resident	
		2 = newcomer	
		3 = cannot be classified	
98	151	LTA's COMPARISON OF ACTUAL AND EXPECTED EFFECTS	
107	164	LTB's COMPARISON OF ACTUAL AND EXPECTED EFFECTS	
		1 = about what was expected	
		2 = better than expected	
		3 = worse than expected	
99	152	FIRST WAY LTA FEELS ACTUAL EFFECTS BETTER OR WORSE THAN EXPECTED	
100	153	SECOND WAY LTA FEELS ACTUAL EFFECTS BETTER OR WORSE THAN EXPECTED	
108	165	FIRST WAY LTB FEELS ACTUAL EFFECTS BETTER OR WORSE THAN EXPECTED	
109	166	SECOND WAY LTB FEELS ACTUAL EFFECTS BETTER OR WORSE THAN EXPECTED	
		Effects Better:	
		1 = increased job opportunities	(3)
		2 = financial benefits	(4)
		3 = improved community and commercial facilities	(1,5,7,8, 12)
		4 = increased population	(11)
		5 = desirable new people	(10)
		6 = other	(2,6,9, 13,14,15, 16,17)
		Effects Worse:	
		11 = population increase	(54,69,76)
		12 = deteriorated community and commercial facilities	(50,52,55, 57,62,64, 67,68,72, 73,74,77)
		13 = increased job competition	(56,75)
		14 = higher cost of living	(53,81)
		15 = increased pollution and environmental problems	(61,63,66)

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		16 = increased town problems	(51,65,71, 79)
		19 = other	(58,59,60, 70,78,80 82,83)
101	155	WHETHER LTA IS GLAD OR UNHAPPY PROJECT CAME	
		1 = glad	
		2 = unhappy	
102	156	FIRST REASON LTA IS GLAD OR UNHAPPY PROJECT CAME	
103	157	SECOND REASON LTA IS GLAD OR UNHAPPY PROJECT CAME	
		Glad:	
		1 = increased job opportunities	(3)
		2 = financial benefits	(1,24)
		3 = improved community and commercial facilities	(2,7,9,10, 11,13,19, 21,22)
		4 = increased population	(15)
		5 = desirable new people	(8,14)
		6 = other	(4,5,6,12, 16,17,18, 20,23,25, 26)
		Unhappy:	
		11 = population increase	(52)
		12 = deteriorated community and commercial facilities	(56,57,58, 59,61,64, 71,72)
		13 = increased job competition	
		14 = higher cost of living	(55,69,73)
		15 = increased pollution and environmental problems	
		16 = increased town problems	(50,60,68)
		17 = changed life style	
		18 = undesirable new people	(51,53,63, 67,76)
		19 = other	(54,62,65, 66,70,74, 75,77,78, 79)

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
114	174	PRIMARY REASON LTC FEELS EFFECT WILL BE GOOD OR BAD	
		Good:	
		1 = increased job opportunities	(5,11)
		2 = financial benefits	(4)
		3 = improved community and commercial facilities	(1,2,7)
		4 = increased population	(13)
		5 = desirable new people	
		6 = other	(3,6,8,9, 10,12)
		Bad:	
		11 = population increase	(55,67)
		12 = deteriorated community and commercial facilities	(54,58)
		13 = increased job competition	
		14 = higher cost of living	(53,64)
		15 = increased pollution and environmental problems	(51,57,59)
		16 = increased town problems	(52,56,61)
		17 = changed life style	(50,65,66)
		18 = undesirable new people	(60)
		19 = other	(62,63,68)
105	162	FIRST WAY LTB EXPECTED COMMUNITY TO CHANGE	
106	163	SECOND WAY LTB EXPECTED COMMUNITY TO CHANGE	
111	171	FIRST WAY LTC EXPECTS COMMUNITY TO CHANGE	
112	172	SECOND WAY LTC EXPECTS COMMUNITY TO CHANGE	
		1 = better job opportunities	(31,40)
		2 = growth, increased population	(3,6,9)
		3 = undesirable new people	(16)
		4 = higher cost of living	(2,15,29)
		5 = improved community and commercial facilities	(4,5,8,21, 22,23,24, 27,41,44)
		6 = deteriorated community and commercial facilities	(10,11,12, 13,14,35, 42)
		7 = changed life style	(33,36,37)
		8 = increased town problems	(17,32)
		9 = increased pollution and environmental problems	(20,26)

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		10 = other	(1,7,18,19, 25,28,30, 34,38,39, 43,45)
113	173	WHETHER LTC FEELS PROJECT EFFECTS GOOD OR BAD 1 = good 2 = bad	
115	183	LOCATION OF NEWCOMER HOUSEHOLD HEAD'S PREVIOUS JOB (NOTE: the original codes are different for each currently affected community. For this reason and because the codes are ambiguous, the original codes are not given.) Montana 1 = Billings 2 = Butte 3 = Colstrip 4 = Great Falls 5 = Hardin 6 = Helena 7 = Kalispell 8 = Miles City 9 = Missoula 10 = other Montana North Dakota 11 = Bismarck 12 = Center 13 = Fargo 14 = Larsen 15 = Minot 16 = Noonan 17 = Stanton 18 = Washburn 19 = Williston 20 = other North Dakota Wyoming 21 = Casper 22 = Cheyenne 23 = Cody 24 = Evanston 25 = Gillette	

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		26 = Green River	
		27 = Jackson Hole	
		28 = Kemmerer	
		29 = Laramie	
		30 = Newcastle	
		31 = Rawlins	
		32 = Rock Springs	
		33 = Sheridan	
		34 = Wheatland	
		35 = other Wyoming	
		36 = Arizona	
		37 = Colorado	
		38 = Idaho	
		39 = Nebraska	
		40 = Nevada	
		41 = New Mexico	
		42 = South Dakota	
		43 = Utah	
		44 = West Coast (Oregon, Washington, California)	
		45 = Midwest (Minnesota, Wisconsin, Illinois, Indiana, Iowa, Kansas, Missouri, Michigan, Ohio)	
		46 = South (Georgia, Louisiana, Texas, Oklahoma, Tennessee, West Virginia, Virginia, North Carolina, South Carolina, Florida, Mississippi, Arkansas, Alabama, Kentucky)	
		47 = Northeast	
		48 = North Central	
		49 = other U.S.	
		50 = outside U.S.	
116	191	PRIMARY REASON NEWCOMER HOUSEHOLD HEAD MOVED INTO AREA	
		Job-related:	
		1 = job opportunities	(5)
		2 = job with better pay	(4)
		3 = better job	(3)
		4 = only place could find a job	(20)
		5 = relocation (transfer)	(2,21)
		6 = proximity to job	(11)

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		Other:	
		7 = housing availability	(9,10)
		8 = desire to live in the area	(12,15,17, 22,24,25)
		9 = proximity to family and friends	(7,19)
		10 = other	(1,6,13, 14,16,18, 23)
117	193	NEWCOMER'S FIRST WORD THAT BEST DESCRIBES COMMUNITY	
118	194	NEWCOMER'S SECOND WORD THAT BEST DESCRIBES COMMUNITY	
		1 = easy	
		2 = happy	
		3 = modern	
		4 = lonely	
		5 = competitive	
		6 = impersonal	
		7 = dull	
		8 = exciting	
		9 = conservative	
		10 = rewarding	
		11 = unfriendly	
		12 = isolated	
		13 = slow-moving	
		14 = difficult	
		15 = friendly	
		16 = expensive	
		17 = relaxed	
		18 = dirty	
119	195	NEWCOMER'S FIRST THING LIKED MOST ABOUT COMMUNITY	
120	196	NEWCOMER'S SECOND THING LIKED MOST ABOUT COMMUNITY	
		1 = job-related	(1,2,3,4, 27)
		2 = lower cost of living	(16,23,55, 75)
		3 = recreation opportunities	(12,13,22, 34,42,45, 49,54)
		4 = good community and commercial facilities	(11,18,20, 28,29,30, 41,69,71)

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		5 = community and church activities	(9,10,66)
		6 = friendly people	(5)
		7 = type of people	(21,24,38, 65)
		8 = proximity to family and friends	(15,46,60)
		9 = distance from family	(37,76,53)
		10 = location of community	(17,26,31, 36,43,58, 62,77)
		11 = life style	(39,63,67)
		12 = rural atmosphere	(14)
		13 = environment, aesthetic beauty	(7,8,19, 35,44,48, 50,51,56, 61,64,72, 73)
		14 = other	(6,25,32, 33,40,47, 52,57,59, 68,70,74)
121	197	NEWCOMER'S FIRST THING LIKED LEAST ABOUT COMMUNITY	
122	198	NEWCOMER'S SECOND THING LIKED LEAST ABOUT COMMUNITY	
		1 = job and wage problems	(28,30,64, 69,80)
		2 = cost of living	(6,31,39, 86)
		3 = lack of recreation, entertainment opportunities	(10,12,17, 26,27,37, 42,44,51)
		4 = inadequate community and commercial facilities	(5,9,14,16, 18,25,29, 33,40,45, 48,49,54, 58,63,68, 70,72,77, 78,79)
		5 = housing-related problems	(1,2,46,71)
		6 = people-related problems	(3,8,11,19, 32,34,52 59,74,93)

Variable Number	Original Variable Number	Variable Label and Codes	Original Codes
		7 = crime	(4,24,62)
		8 = dissatisfied with environment	(7,15,20, 35,38,47, 50,57,65, 67,82,85, 88,89,91)
		9 = other	(13,21,22, 23,36,41, 43,53,55, 56,60,61, 66,73,75, 76,81,83, 84,87,90, 92)

3. Descriptive Data Summaries

In order that the data may be readily used, summary analyses were performed for individual communities for each of the variables of the revised data set. The variables selected were those considered most helpful to evaluation of impacts of large energy-related projects and most significant for description of the surveyed communities. The data summaries were composed concisely and simply to facilitate ease of use.

In addition to analysis by community, the data were combined and analyzed for two groups, the previously affected and the currently affected communities. Combination of these communities allows generalizations to be made about the impacts of the projects. The two pre-impact communities--Killdeer and St. George--are sufficiently different that they are best analyzed individually.

Each of the 122 variables of the revised data set was analyzed by the program "Statistical Package for the Social Sciences," referred to as SPSS. The analysis consisted of three types: frequency distributions, cross tabulations or joint frequency distributions, and associated statistics. These will be discussed in turn following a discussion of the labeling procedures used in the analysis.

a. Labeling

The 122 variables were numbered consecutively and each was assigned a name with the prefix "VAR" followed by its number. Although these names provide for certain processing efficiencies, they are not descriptive. Consequently, each variable was also given an abbreviated 40-character label which SPSS prints with the variable name. SPSS also allows a 20-character label to be associated with each coded value and to be printed whenever the value occurs. No labels were given for codes which are the actual values or mid-points of classes of numerical values. Users should keep in mind that the shortened labels should be used only as reminders; they are not intended to be complete. Users should refer to the Revised Variables Identification List and the Revised Value List for complete descriptions of the variables and values.

b. Frequency Distributions

Frequency distributions were performed for each variable in order to investigate the nature and the distribution of the responses. In pre-impact and post-impact communities, a single frequency distribution was run for each variable. In currently affected communities frequency distributions were run for each variable for everyone and for each of the three groups of interest--long time residents, newcomer construction workers, and other newcomers. Hence, there are four sets of frequency distributions for each currently affected community.

The only exception to this procedure is in the case of the expenditure and income data, that is, Variables 71 to 96. As explained on page 40, the income and expenditure data were subjected to a validity check. In order to provide users the maximum amount of flexibility, two frequency distributions were generated for Variables 71 to 96. The first set of frequency distributions is based upon all of the available income and expenditure data. The second set of frequency distributions is based upon just the income and expenditure data that were judged to be valid (86.9 percent of the responses).

c. Cross-Tabulations

A relationship may exist between variables. Those variables hypothesized to be related were analyzed using joint frequency distributions. These cross-tabulations show each reply for one variable with the reply by the same respondent for another variable. Associated statistics, to be discussed in the following section, give the significance of that relationship. Those variables analyzed by joint frequency distributions are given in the Cross-Tabulated Variables List which follows.

CROSS-TABULATED VARIABLES LIST

First Variable Number and Label		Second Variable Number and Label	
	ALL COMMUNITIES:		
2	LENGTH OF TIME IN COMMUNITY	5	FAMILY SIZE
2	LENGTH OF TIME IN COMMUNITY	50	FIRST WAY FRIENDS MET
2	LENGTH OF TIME IN COMMUNITY	51	SECOND WAY FRIENDS MET
2	LENGTH OF TIME IN COMMUNITY	52	THIRD WAY FRIENDS MET
5	FAMILY SIZE	15	AGE OF HOUSEHOLD HEAD
5	FAMILY SIZE	33	HOUSEHOLD HEAD'S OCCUPATION
33	HOUSEHOLD HEAD'S OCCUPATION	35	HOUSEHOLD HEAD'S PREVIOUS OCCUPATION
59	TYPE OF HOME PREFERRED, ALL RESPONDENTS	57	REASON NOT IN PREFERRED HOME
59	TYPE OF HOME PREFERRED, ALL RESPONDENTS	58	PRESENT HOME TYPE
62-73	SATISFACTION WITH COMMUNITY FACILITIES	2	LENGTH OF TIME IN COMMUNITY
62-73	SATISFACTION WITH COMMUNITY FACILITIES	16	HOUSEHOLD HEAD'S EDUCATION
62-73	SATISFACTION WITH COMMUNITY FACILITIES	92	MONTHLY GROSS FAMILY INCOME
	PRE-IMPACT COMMUNITIES:		
110	WHETHER LTC EXPECTS COMMUNITY TO CHANGE	2	LENGTH OF TIME IN COMMUNITY
110	WHETHER LTC EXPECTS COMMUNITY TO CHANGE	16	HOUSEHOLD HEAD'S EDUCATION
110	WHETHER LTC EXPECTS COMMUNITY TO CHANGE	92	MONTHLY GROSS FAMILY INCOME
111	FIRST WAY LTC EXPECTS COMMUNITY TO CHANGE	2	LENGTH OF TIME IN COMMUNITY
111	FIRST WAY LTC EXPECTS COMMUNITY TO CHANGE	16	HOUSEHOLD HEAD'S EDUCATION
111	FIRST WAY LTC EXPECTS COMMUNITY TO CHANGE	92	MONTHLY GROSS FAMILY INCOME
112	SECOND WAY LTC EXPECTS COMMUNITY TO CHANGE	2	LENGTH OF TIME IN COMMUNITY
112	SECOND WAY LTC EXPECTS COMMUNITY TO CHANGE	16	HOUSEHOLD HEAD'S EDUCATION
112	SECOND WAY LTC EXPECTS COMMUNITY TO CHANGE	92	MONTHLY GROSS FAMILY INCOME

First Variable Number and Label		Second Variable Number and Label	
113	WHETHER LTC FEELS PROJECT EFFECTS GOOD OR BAD	2	LENGTH OF TIME IN COMMUNITY
113	WHETHER LTC FEELS PROJECT EFFECTS GOOD OR BAD	16	HOUSEHOLD HEAD'S EDUCATION
113	WHETHER LTC FEELS PROJECT EFFECTS GOOD OR BAD	92	MONTHLY GROSS FAMILY INCOME

CURRENTLY AFFECTED COMMUNITIES:

98	LTA's COMPARISON OF ACTUAL AND EXPECTED EFFECTS	2	LENGTH OF TIME IN COMMUNITY
98	LTA's COMPARISON OF ACTUAL AND EXPECTED EFFECTS	16	HOUSEHOLD HEAD'S EDUCATION
98	LTA's COMPARISON OF ACTUAL AND EXPECTED EFFECTS	92	MONTHLY GROSS FAMILY INCOME
101	WHETHER LTA GLAD OR UNHAPPY PROJECT CAME	2	LENGTH OF TIME IN COMMUNITY
101	WHETHER LTA GLAD OR UNHAPPY PROJECT CAME	16	HOUSEHOLD HEAD'S EDUCATION
101	WHETHER LTA GLAD OR UNHAPPY PROJECT CAME	92	MONTHLY GROSS FAMILY INCOME
117	NEWCOMER'S FIRST WORD BEST DESCRIBES COMMUNITY	16	HOUSEHOLD HEAD'S EDUCATION
117	NEWCOMER'S FIRST WORD BEST DESCRIBES COMMUNITY	92	MONTHLY GROSS FAMILY INCOME
118	NEWCOMER'S SECOND WORD BEST DESCRIBES COMMUNITY	16	HOUSEHOLD HEAD'S EDUCATION
118	NEWCOMER'S SECOND WORD BEST DESCRIBES COMMUNITY	92	MONTHLY GROSS FAMILY INCOME

POST-IMPACT COMMUNITIES:

104	WHETHER LTB EXPECTED COMMUNITY TO CHANGE	2	LENGTH OF TIME IN COMMUNITY
104	WHETHER LTB EXPECTED COMMUNITY TO CHANGE	16	HOUSEHOLD HEAD'S EDUCATION
104	WHETHER LTB EXPECTED COMMUNITY TO CHANGE	92	MONTHLY GROSS FAMILY INCOME
105	FIRST WAY LTB EXPECTED COMMUNITY TO CHANGE	2	LENGTH OF TIME IN COMMUNITY
105	FIRST WAY LTB EXPECTED COMMUNITY TO CHANGE	16	HOUSEHOLD HEAD'S EDUCATION
105	FIRST WAY LTB EXPECTED COMMUNITY TO CHANGE	92	MONTHLY GROSS FAMILY INCOME
106	SECOND WAY LTB EXPECTED COMMUNITY TO CHANGE	2	LENGTH OF TIME IN COMMUNITY
106	SECOND WAY LTB EXPECTED COMMUNITY TO CHANGE	16	HOUSEHOLD HEAD'S EDUCATION
106	SECOND WAY LTB EXPECTED COMMUNITY TO CHANGE	92	MONTHLY GROSS FAMILY INCOME

First Variable Number and Label		Second Variable Number and Label	
107	LTB COMPARISON OF ACTUAL AND EXPECTED EFFECTS	2	LENGTH OF TIME IN COMMUNITY
107	LTB COMPARISON OF ACTUAL AND EXPECTED EFFECTS	16	HOUSEHOLD HEAD'S EDUCATION
107	LTB COMPARISON OF ACTUAL AND EXPECTED EFFECTS	92	MONTHLY GROSS FAMILY INCOME

d. Statistics

Statistics computed for each variable and printed below the frequency distribution tables are the following: mean, median, mode, standard error, standard deviation, variance, kurtosis, skewness, range, minimum, maximum. Although several of these summary statistics are not relevant for all variables, they were included for all of them in the interest of processing efficiency. Users should be careful to use only the relevant statistics. For example, only the mode is relevant for questions whose codes represent verbal responses; there is no "average" value for a variable such as "First Thing Liked About the Community." It should also be noted that, for the variables whose codes were grouped and assigned the mid-value of the class, the statistics are approximations based on the mid-values and are not exact. Non-responses were treated as missing values and ignored when calculating summary statistics.

The chi-square statistic, which provides insight into the relationship between variables, was calculated in association with cross-tabulations and printed below the tables. Non-responses were not included in the calculation of the chi-square statistic.

III. PROJECT SURVEY

In addition to the relatively lengthy interviews conducted in the Household Survey, it was also necessary to collect information on the workers at the major projects (greater than 100 employees) under way during the summary of 1975 in a nine-state Mountain Region in order to build up the number of observations on certain key relationships to a usable level. A total of sixteen projects was identified and of these, fourteen were surveyed as listed in Table 10. The survey was conducted by distributing a short schedule (short enough to be printed on an IBM card) and having them collected by company personnel. Even though it meant soliciting information from thousands of workers, this approach was feasible and a good response rate was expected because of the brevity of the questionnaire and the cooperation of company personnel.

A. OBJECTIVES AND PROCEDURES

Because the objectives of the study center around the concept of non-local workers, it should be noted that for the purposes of this study a non-local worker is defined as a person working on the construction of an energy-related project who is not living in the same town he was living in

TABLE 10

PROJECTS INCLUDED IN SURVEY INCLUDING LOCATION, OWNER, AND CONTRACTOR

Project Number	Project Name	Location	Owner	Contractor
1	Coronado 1,2,3	5 miles NE of St. Johns, Arizona	Salt River Project	Bechtel
2	Craig 1,2--Yampa Power Plant	South of Craig, Colorado	Colorado Ute, Salt River Project, *et al.*	Stearns-Roger
3	Hayden 2	2 miles east of Hayden, Colorado	Colorado Ute, Salt River Project, *et al.*	Stearns-Roger
4	Colstrip 1,2	Colstrip, Montana	Montana Power Co.	Bechtel
5	Center--Milton R. Young	Center, North Dakota	Minnkota Power	Sornsin Foley Bros. Babcock-Wilcox Hewitt-Robins Wheelabrator-Frye
6	Leland Olds	Stanton, North Dakota	Basin Electric	Burns and Roe
7	San Juan 1	Fruitland, New Mexico	Public Service of N.M. and Tucson Gas and Electric	Stearns-Roger
8	Emery	Between Orangeville and Emery, Utah	Utah Light and Power	Jelco
9	Huntington 2	West of Huntington, Utah	Utah Light and Power	Jelco
10	Jim Bridger 2,3	30 miles east of Rock Springs, Wyoming	Pacific Power and Light	Bechtel
11	Texaco Lake Expansion	Lake DeSmet between Buffalo and Story, Wyoming	Texaco Oil Co.	Green Construction Co.

TABLE 10 (continued)

Project Number	Project Name	Location	Owner	Contractor
12	Sun Oil-Cordero Mine	South of Gillette, Wyoming	Sun Oil Company	Fluor Utah Nicholson Wagonhammer Reeves Fairfield
13	Texas Gulf Sulphur	55 miles west and north of Rock Springs, Wyoming	Texas Gulf Sulphur	Brown and Root Stearns-Roger
14	Wyodak	6 miles east of Gillette, Wyoming	Black Hills Power and Light and Pacific Power and Light	Stone and Webster

before he began to work on the construction of the project. The objective of the study was to elicit information concerning four characteristics of the construction workers. The four characteristics and the questions pertaining to them (see Figure 1) are as follows:

(a) the occupation of workers (Question 1);

(b) the proportion of the workers who are non-local (Question 3);

(c) the proportion of non-local workers who bring their families with them when they come to work on the construction of an energy-related project (Question 6);

(d) the size of the non-local workers' families (Questions 4 and 5); and

(e) the types of communities in which the non-local workers chose to live (Question 2).

Management personnel of each project were approached to solicit cooperation for the distribution and collection of questionnaires. The procedures, which varied somewhat with each project, are discussed in more detail in the CONSTRUCTION WORKER PROFILE: FINAL REPORT.

In preparation for data processing, the codes for all questions were placed directly in the blanks on the right-hand edge of the computer card questionnaires; all questionnaires were coded by the same person. The codes were usually punched directly on the questionnaires. In some cases, the cards had been reproduced locally onto 8-1/2"x11" paper rather than cards, requiring that the information be transferred to computer cards at the data processing stage. Keypunching was verified by comparing the codes on each card with the punched values.

B. PROJECT SURVEY DATA

Although there are only 10 variables in the Project Survey data, the coding or recoding procedures need explanation. With the exceptions of "Local Address," "Previous Address," and "Family's Address," the codes for the variables are the same for all projects. For these variables, all projects within the same state have identical codes, but the codes vary from state to state. The town names were listed and numbered consecutively as they were encountered by the

FIGURE 1

PROJECT SURVEY QUESTIONNAIRE

1. What is your occupation (job title)? ____________________ 1____ 2____

2. What is your local address? __________ Street __________ Town 3____ 4____

3. a. Is your local address in the same town as it was before you started working on this job? (circle one) Yes No 5____ 6____

 b. If no, where did you live previously? __________ Town __________ State 7____

4. What is your marital status? (circle one) Married Single Widowed Divorced 8____

IF SINGLE, WIDOWED, OR DIVORCED, PLEASE DO NOT ANSWER ANY FURTHER QUESTIONS. THANK YOU.

IF MARRIED,

5. How many children under 18 do you have? ____________________children 9____ 10____

6. a. Is your spouse living with you at your local address (circle one) Yes No 11____

 b. If your spouse is NOT living with you at your local address, where is your spouse living? __________ Town __________ State 12____ 13____ 14____

THANK YOU VERY MUCH FOR YOUR COOPERATION 15____ 16____ coder, hence they are not in alphabetical order. Names of adjacent states were coded identically for all projects and the code "105" represents a non-adjacent state for all three variables and all fourteen projects.

Before storing the data on tape, a check was made on Variable 2, "Local Address." All towns given as local addresses were located relative to the project, and those towns which are more than 120 miles away were eliminated and treated as non-responses. Approximately one percent of responses were eliminated in this manner and are attributed to misinterpretation of the question by the respondent.

Because of the importance of the local to non-local ratio, considerable effort was made to identify the status of each respondent for Variable 3, "Whether Respondent is Local Worker." If a respondent did not answer question 3a, but both local and previous address were given, these two addresses were compared. If the addresses were identical, the respondent was labeled a local worker. If, on the other hand, the local and previous addresses were different, the respondent was classed a non-local worker. Approximately 98.9 percent of all respondents were classified as either local or non-local.

Variable 10, "Respondent's Family Size," was generated by the computer in the following manner: if the respondent was divorced, widowed, or single, the family size was one. If the respondent was married, the number of children under 18 (Variable 6), and whether family was present (Variable 7) were checked. If the family was absent, family size was designated as one. If the family was present, the number of children plus two was computed as family size.

The variables are listed by name, number, position on computer cards, number of interview question which corresponds to the variable on the Variable and Value Identification List which follows. The appropriate codes are also given. The codes for Variables 2, 4, and 8 are listed for each of the six states.

VARIABLE AND VALUE IDENTIFICATION LIST

Variable Number	Column Numbers	Question Number	Variable Description and Codes
1	1-8	1	RESPONDENT'S OCCUPATION 1 = supervisor, superintendent 2 = foreman 3 = engineer 4 = surveyor 5 = ironworker, rod bender, rod buster 6 = cement finisher, cement mason 7 = millwright 8 = boilermaker 9 = pipefitter, steamfitter 10 = electrician 11 = painter 12 = carpenter 13 = plumber 14 = mechanic 15 = sheet metal worker 16 = bricklayer 17 = welder, mechanic-welder 18 = laborer, rigger 19 = helper 20 = winterization 21 = operating engineer, operative 22 = oiler 23 = teamster, truckdriver 24 = warehouseman, teamster-warehouseman 25 = safety, first aid 26 = office--accountant, timekeeper supervisor, timekeeper, field contract administrator, field buyer, project manager, purchasing clerk, clerk, material coordinator, receiving, site manager, contracts manager, coordinator, custodian, draftsman, tool room, personnel supervisor, paymaster, secretary, drawing control, construction management manager, project purchasing agent, office runner, aide, construction scheduler 27 = other--lab technician, labor relations supervisor, patrol, civil technician, refrigeration maintenance, grade checker, pier drilling observer, civil inspector, supervisor of security, security, field inspector, tireman, engineering aide

Variable Number	Column Numbers	Question Number	Variable Description and Codes
3	17-24	3a	WHETHER RESPONDENT IS A LOCAL WORKER 1 = local 2 = non-local
5	33-40	4	RESPONDENT'S MARITAL STATUS 1 = married 2 = single 3 = divorced 4 = widowed 5 = separated
6	41-48	5	NUMBER OF CHILDREN IN RESPONDENT'S FAMILY Codes are actual number of children.
7	49-56	6a	WHETHER FAMILY IS LIVING WITH RESPONDENT 1 = yes 2 = no
9	65-72		PROJECT NAME 1 = Coronado Power Plant 2 = Craig Power Plant 3 = Hayden Power Plant 4 = Colstrip Power Plant 5 = Milton R. Young Power Plant 6 = Leland Olds Power Plant 7 = San Juan Power Plant 8 = Emery Power Plant 9 = Huntington Power Plant 10 = Jim Bridger Power Plant 11 = Texaco Lake Expansion Project 12 = Cordero Mine 13 = Texas Gulf Sulfur Plant 14 = Wyodak Mine
10	73-80	computed	SIZE OF RESPONDENT'S FAMILY Codes are actual number of persons in family.

Variable Number	Column Numbers	Question Number	Variable Description and Codes
2	9-16	2	RESPONDENT'S LOCAL ADDRESS
4	25-32	3b	RESPONDENT'S PREVIOUS ADDRESS
8	57-64	6b	WHERE RESPONDENT'S FAMILY IS LIVING IF NOT PRESENT

All Projects:

90 = Arizona
91 = California
92 = Colorado
93 = Idaho
94 = Minnesota
95 = Montana
96 = Nebraska
97 = Nevada
98 = New Mexico
99 = North Dakota
100 = South Dakota
101 = Texas
102 = Utah
103 = Wyoming
105 = non-adjacent states

Arizona Projects:

1 = St. Johns
2 = Page
3 = Phoenix
4 = Concho
5 = Globe
6 = Clifton
7 = Showlow
8 = Tucson
9 = Eagar
10 = Flagstaff
11 = Miami
12 = Springerville
13 = Apache Junction
14 = Winslow
15 = Lyman Lake State Park
16 = Mesa
17 = Pearce
18 = Holbrook
19 = Camp Verde
20 = Prescott
21 = Chandler
22 = Window Rock
23 = Kirkland
24 = Florence
25 = Glendale
26 = Sedona
27 = Navajo
28 = Lakeside
29 = Pinetop
30 = Taylor

Variable Number	Column Numbers	Question Number	Variable Description and Codes
			Colorado Projects: 1 = Highland Park 2 = Greeley 3 = Craig 4 = Arvada 5 = Steamboat Springs 6 = Lakewood 7 = Hayden 8 = Leadville 9 = Palisade 10 = Golden 11 = Denver 12 = Cortez 13 = Canon City 14 = Cowdrey 15 = Colorado Springs 16 = Grand Junction 17 = Longmont 18 = Oak Creek 19 = Basalt 20 = Littleton 21 = Estes Park 22 = Fort Collins 23 = Montrose 24 = Carbondale 25 = Pueblo 26 = Englewood 27 = Glendale 28 = Northglen 29 = Glenwood Springs 30 = Boulder 31 = Monte Vista 32 = Commerce City 33 = Lafayette 34 = Wheat Ridge 35 = Westminster 36 = Evans 37 = Yampa 38 = Bennett 39 = Clifton 40 = Austin 41 = Grand Valley 42 = Rifle 43 = Whitewater 44 = Avon 45 = Fruita 46 = Mancos 47 = Las Animas 48 = Stratton 49 = Loma 50 = Milner

Variable Number	Column Numbers	Question Number	Variable Description and Codes

51 = Wellington
52 = Berthoud
53 = Hamilton
54 = Loveland
55 = Broomfield
56 = Penrose
57 = Collbran
58 = Pagosa Springs
59 = Clark
60 = Kremmling
61 = Gunnison
62 = Meeker
63 = Manassa
64 = Delta
65 = Vail
66 = Jefferson
67 = Gypsum
68 = Cedaredge
69 = Georgetown
70 = Dolores
71 = Mack
72 = Parshall
73 = Fountain
74 = Granby
75 = Durango
76 = Maybell
77 = New Castle
78 = Riverbend
79 = Windsor
80 = Wray
81 = Phippsburg
82 = Conifer
83 = Brush
84 = Byers

Montana Projects:
1 = Billings
2 = Colstrip
3 = Forsyth
4 = Great Falls
5 = Miles City
6 = Bozeman
7 = Anaconda
8 = Laurel
9 = Missoula
10 = Stevensville
11 = Huntley
12 = Hysham
13 = Hardin
14 = Butte
15 = Luther

Variable Number	Column Numbers	Question Number	Variable Description and Codes
			16 = Whitefish
			17 = Roberts
			18 = Lewistown
			19 = Whitetail
			20 = Red Lodge
			21 = Broadview
			22 = Ashland
			23 = Lame Deer
			24 = Crow Agency
			25 = Columbus
			26 = Plentywood
			27 = Sidney
			28 = Rosebud
			29 = Broadus
			30 = West Yellowstone
			31 = Browning
			32 = Bridger
			33 = Joliet
			34 = Birney
			New Mexico Projects:
			1 = Farmington
			2 = Bloomfield
			3 = Aztec
			4 = Albuquerque
			5 = Shiprock
			6 = Flora Vista
			7 = Fruitland
			8 = Kirtland
			9 = Waterflow
			10 = Blanco
			11 = Mancos, Colorado
			12 = La Plata
			13 = Los Lunas
			14 = Lumberton
			North Dakota Projects:
			1 = Center
			2 = Mandan
			3 = Bismarck
			4 = Hazen
			5 = Stanton
			6 = Washburn
			7 = Beulah
			8 = Bowman
			9 = Kulm
			10 = Pick City
			11 = Garrison
			12 = Concrete
			13 = Underwood
			14 = Lakota
			15 = Mountain

Variable Number	Column Numbers	Question Number	Variable Description and Codes
			16 = Goldenvalley 17 = Edgeley 18 = Rugby 19 = Dickinson 20 = Minot 21 = Langdon 22 = Fairdale 23 = Tioga 24 = Edmore 25 = White Earth 26 = Riverdale 27 = Linton 28 = Canoo 29 = Fargo 30 = Amenia 31 = West Fargo 32 = Jamestown 33 = New Salem 34 = Belcourt 35 = Drayton 36 = Selfridge 37 = Stanley 38 = Grand Forks 39 = Wilton 40 = Zap 41 = Larimore 42 = McClusky
			Utah Projects: 1 = Huntington 2 = Sandy 3 = Price 4 = Ferron 5 = Layton 6 = Proud 7 = Salt Lake City 8 = Orangeville 9 = Castle Dale 10 = Salina 11 = Fillmore 12 = Orem 13 = Bountiful 14 = Clawson 15 = Junction 16 = Nephi 17 = Payson 18 = Richfield 19 = Helper 20 = Moab 21 = Wellington 22 = Mount Pleasant 23 = Grantsville

Variable Number	Column Numbers	Question Number	Variable Description and Codes
			24 = Murray
			25 = Circleview
			26 = Heber
			27 = Springville
			28 = Lehi
			29 = Pleasant Grove
			30 = Manti
			31 = Kanab
			32 = Wallsburg
			33 = Kanosh
			34 = South Jordon
			35 = Salem
			36 = Huntington Lake State Park
			37 = Cleveland
			38 = Monroe
			39 = Morgan
			40 = Levan
			41 = Lapoint
			42 = Spanish Fork
			43 = Fairview
			44 = Magna
			45 = American Fork
			46 = Blanding
			47 = West Jordon
			48 = Kamas
			49 = Brighton
			50 = Cedar City
			51 = Midvale
			52 = Goshen
			53 = Escalante
			54 = Santaquin
			55 = Elmo
			56 = Herriman
			57 = Emery
			58 = Ogden
			59 = Delta
			60 = Aurora
			61 = Beaver
			62 = Green River
			63 = Brigham City
			64 = Kearns
			65 = Taylorsville
			66 = Centerville
			67 = St. George
			68 = Vernal
			69 = Kaysville
			70 = Farmington
			71 = Tooele

Variable Number	Column Numbers	Question Number	Variable Description and Codes
			Wyoming Projects:
			1 = Gillette
			2 = Casper
			3 = Glenrock
			4 = Etna
			5 = Rock Springs
			6 = Buffalo
			7 = Laramie
			8 = Pine Bluffs
			9 = Cheyenne
			10 = Eden
			11 = Chugwater
			12 = Riverton
			13 = Sheridan
			14 = Rawlins
			15 = Evansville
			16 = Shoshoni
			17 = Douglas
			18 = Moorcroft
			19 = Boulder
			20 = Hanna
			21 = Farson
			22 = Story
			23 = Burns
			24 = Wamsutter
			25 = Point of Rocks
			26 = Green River
			27 = Jim Bridger Trailer Court
			28 = Thermopolis
			29 = Lander
			30 = Reliance
			31 = Superior
			32 = Kemmerer
			33 = Evanston
			34 = Bechtel and Reliance Trailer Court
			35 = Sky View Trailer Court
			36 = Lyman
			37 = Pinedale
			38 = Shirley Basin
			39 = Granger
			40 = Jackson
			41 = La Barge
			42 = Cody
			43 = Ten Sheep
			44 = Mountain View
			45 = Wheatland
			46 = Rock River
			47 = Mills
			48 = Big Horn
			49 = Fort Bridger
			50 = Afton

Variable Number	Column Numbers	Question Number	Variable Description and Codes
			51 = Yorktown Village 52 = Scoop Shovel Trailer Park 53 = Diamondville 54 = Cokeville 55 = Glendo 56 = Little America 57 = Torrington 58 = Guernsey 59 = Clearmont 60 = Ulm 61 = Acme 62 = Leiter 63 = Ucross 64 = Dayton 65 = Manville 66 = Banner

C. DESCRIPTIVE DATA SUMMARIES

Descriptive data summaries were performed for each project and for all projects combined to facilitate analysis. The data summaries were composed concisely and simply and consist of three types: frequency distributions, cross-tabulations or joint frequency distributions, and summary statistics. The processing was performed by utilizing the "Statistical Package for the Social Sciences" (SPSS).

Each variable was assigned a 40-character (or shorter) label which is printed with the variable. Each code was given a 20-character label which is printed when each value occurs, except where codes were actual values.

Frequency distributions were performed for each variable for all respondents in order to investigate the distribution of the responses. The responses for each project were also separated into local and non-local workers and subjected to additional frequency distribution analyses for each variable. Comparisons between the two groups of workers are therefore possible.

Joint frequency distributions, or cross-tabulations, allow a comparison of responses for two variables. Variables 7 and 10, "Whether Family is Living with Respondent" and "Size of Respondent's Family," were compared by cross-tabulation for each of the three subdivisions--all respondents, local workers, and non-local workers--to determine whether a relationship exists. No other cross-tabulations were performed.

Relevant summary statistics were calculated in association with the frequency distributions and cross-tabulations, and were printed below the tables. For variables whose codes are representative of verbal responses, the mode is the only relevant statistic. For the remaining variables the code represents the actual numerical value and the following summary statistics are meaningful: mean, median, mode, standard error, standard deviation, variance, kurtosis, skewness, range, minimum, maximum. The chi-square statistic is printed with joint frequency distribution tables. Non-responses were treated as missing values and ignored in the calculation of all statistics.

IV. ORDERING PROCEDURE AND APPROXIMATE COST

The Household Survey raw and revised data sets and the Project Survey raw data are available in two forms: magnetic computer tape and computer cards. The data summaries for the Household Survey and Project Survey are available in the form of computer printout only. All forms of the data are available by individual community or project. In addition, the data summaries of the combined Household Survey post-impact and currently affected communities and the data summary of the combined projects may be obtained. Any combination of revised and raw data, data summaries, communities, and projects can be provided.

A. GENERAL ORDERING PROCEDURES

The complexity of the ordering procedure varies somewhat, depending on the type of data desired. In all cases, requests may be made by telephone (and confirmed in writing) or by mail to:

Mountain West Research, Inc.
123 E. University, Suite 219
Tempe, Arizona 85281
(602) 968-7991
ATTENTION: Ms. Jan Barringer

Users should specify four things for any order:

(1) the data desired;

(2) method of shipment;

(3) where and to whom the data are to be shipped; and

(4) who should be billed.

Additional information is required depending on the type of data requested. The information necessary to fulfill a request is discussed below for card, tape, and printout copies.

1. Card Copies of Data

Card copies are available for all data. Each Household Survey card is numbered in the last five columns with the number of the questionnaire and the card number within that questionnaire to help users preserve order. Because only one card is required for each Project Survey case, the order is insignificant and the cards are not numbered. The cards will be separated and labeled by community or project. When ordering Household Survey data, the user should be careful to specify whether the revised or raw data set is desired. Any combination of communities and raw and revised data may be purchased.

2. Tape Copies of Data

In order to make the tape generated by Arizona State University's Univac 1110 compatible with other computer systems, several items must be specified:

(1) The language desired--unless the user has access to a Univac computer, the only language available is EBCDIC. EBCDIC is compatible with most computer systems in this country, but users should take care to ensure that the tape will be usable. Users who have access to Univac computer systems may request the data in Univac Fieldata. If neither language is compatible with computer systems accessible to the user, a card copy of the data should be ordered.

(2) The number of tracks the user's system utilizes and whether it employs even or odd parity. (Tape with either seven or nine tracks may be requested, but nine-track tape is available only with odd parity.)

(3) The number of frames per inch the user's unit handles--nine-track tape is available only with 1600 FPI and odd parity options. Seven-track tape may have high density (800 FPI), medium density (556 FPI), or low density (200 FPI) options, and may use even or odd parity.

(4) Thickness of tape--only two thicknesses are available: 1.0 and 1.5 mill. If incompatible with user's system, cards should be ordered. Only one length of tape, 2400 feet, is available. One tape will be sufficient in almost all cases.

3. Printout Copies of the Data Summaries

No information in addition to that listed in Part A, "General Ordering Procedures," is required. Printouts are available in one form only; thus, no options need be specified.

4. Data Sets

The following data sets will be provided upon request:

Household Survey Communities:

	Number of Households
(primary data set, revised data set, and data summaries)	
Conrad, Montana	87
Langdon, North Dakota	92
Colstrip, Montana	148
Forsyth, Montana	193
Center, North Dakota	68
Green River, Wyoming	254
Rock Springs, Wyoming	432
Killdeer, North Dakota	67
St. George, Utah	91
(data summaries)	
Five currently affected communities combined	1095
Two post-impact communities combined	158

Project Survey Projects:

	Number of Surveyed Employees
(primary data base and data summaries)	
Coronado Power Plant	119
Craig Power Plant	307
Hayden Power Plant	483
Colstrip Power Plant	161
Milton R. Young Power Plant	73
Leland Olds Power Plant	193
San Juan Power Plant	234
Emery Power Plant	130
Huntington Power Plant	307

	Number of Surveyed Employees
Jim Bridger Power Plant	503
Texaco Lake Expansion Project	206
Cordero Mine	133
Texas Gulf Sulphur Plant	227
Wyodak Mine	92
(data summaries)	
Fourteen projects combined	3168

B. APPROXIMATE COST

Data will be provided at the cost to Mountain West Research. Because testing each possible variation in type and size of order is prohibitively expensive, only rough estimates are possible at the time of printing. As experience increases, more precise estimates will be possible. At the time each order is placed a maximum cost will be cited. Cost of any order will include four elements: (1) labor costs, (2) computer costs, (3) materials, and (4) shipment.

It is assumed that labor costs will be a minimum of $20 for each order. If orders are exceptionally complicated or time-consuming, additional labor charges will be billed.

Computer costs are:

$.20 per SUP (Standard Unit of Processing),
$.02 per page printed,
$.002 per card image read,
$.005 per card image punched or written.

It is estimated that punching or writing 100 cases of Household Survey data (1400 cards or card images) will require 30 SUPs. The computer charges would then be approximately $15.80 ($6.00 for SUPs, $2.80 for images read, and $7.00 for images punched or written). It is estimated that generating 100 pages of printed output will require 8 SUPs. The computer charges for 100 pages of printed data analysis would then be approximately $3.60 ($1.60 for SUPs and $2.00 for printing and paper costs).

Material costs will vary considerably. A magnetic computer tape, at the time of printing, costs $13.95. Computer cards cost $.0025 each. For 100 cases of Household Survey data, the cost of computer cards would be $3.50. Shipment costs will vary with weight, size, and type of shipment.

Examples of two types of orders and their approximate costs are given below:

EXAMPLE 1: Itemized Cost to Obtain the Revised Data for Killdeer (68 cases) on Magnetic Tape or Cards

Charges	Magnetic Tape		Cards	
Labor	$20.00		$20.00	
Computer				
SUPs	4.08	(20.4 @ $.20)	4.08	(20.4 @ $.20)
Images read	1.90	((68x14) @ $.002)	1.90	((68x14) @ $.002)
Images punched or written	4.76	(952 @ $.005)	4.76	(952 @ $.005)
Materials	13.95	(1 @ $13.95)	2.40	(952 @ $.0025)
Shipping	3.00		3.00	
TOTAL	$47.69		$36.14	

EXAMPLE 2: Itemized Cost to Obtain the Descriptive Data Summary for Rock Springs (432 cases, 580 pages)

Charges		
Labor	$20.00	
Computer		
SUPs	9.28	(46.4 @ $.20)
Pages printed	11.60	(580 @ $.02)
Shipping	3.00	
TOTAL	$43.88	

For a single order, labor costs would be the same for the descriptive data summaries for several communities as for one community so the average cost per community would decrease as the number of communities increased.